```
ring/chain nodes :
    9 13 19
chain bonds :
    2 - 14 \quad 5 - 19 \quad 7 - 14 \quad 9 - 10 \quad 9 - 19 \quad 10 - 11 \quad 10 - 12 \quad 10 - 13 \quad 14 - 15 \quad 14 - 16 \quad 19 - 20
ring bonds :
    1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
    1-2 1-6 2-3 2-14 3-4 4-5 5-6 5-19 7-14 9-10 9-19 10-11 10-12 10-13
exact bonds :
    14-15 14-16 19-20
Match level :
    1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 9:CLASS 10:CLASS 11:CLASS
    12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 19:CLASS 20:CLASS
Generic attributes :
    7:
    Saturation
                            : Unsaturated
    Number of Carbon Atoms : less than 7
    Type of Ring System : Monocyclic
Element Count :
    Node 7: Limited
        0,00
        S,S0
        N, NO-2
```

chain nodes :

ring nodes :

1 2 3 4 5 6

7 10 11 12 14 15 16 20

#### 10/768579

=> s 11

SAMPLE SEARCH INITIATED 19:26:47 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 359 TO ITERATE

100.0% PROCESSED 359 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

50 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*
BATCH \*\*COMPLETE\*\*
PROJECTED ITERATIONS: 6044 TO 831

PROJECTED ITERATIONS
PROJECTED ANSWERS:

6044 TO 8316 2003 TO 3397

L2 50 SEA SSS SAM L1

=> d 12 1 5 10

L2 ANSWER 1 OF 50 REGISTRY COPYRIGHT 2006 ACS on STN

RN 871558-73-5 REGISTRY

ED Entered STN: 10 Jan 2006

CN Piperazine, 1-[[(2-methylphenyl)(methylsulfonyl)amino]acetyl]-4-(2-pyridinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C19 H24 N4 O3 S

SR Chemical Library

Supplier: Enamine

$$\begin{array}{c|c} & \circ & \circ \\ & \circ & \circ \\ & S-Me \\ \hline \\ N & N & C-CH_2-N \\ \hline \\ Me \end{array}$$

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L2 ANSWER 5 OF 50 REGISTRY COPYRIGHT 2006 ACS on STN

RN 867186-99-0 REGISTRY

ED Entered STN: 10 Nov 2005

CN Piperazine, 1-(2-methoxyphenyl)-4-[(2-phenylethyl)[(2,4,6-trimethylphenyl)sulfonyl]amino]acetyl]- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C30 H37 N3 O4 S

SR Chemical Library

Supplier: TimTec, Inc.

LC STN Files: CHEMCATS

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L2 ANSWER 10 OF 50 REGISTRY COPYRIGHT 2006 ACS on STN

RN 850371-90-3 REGISTRY

ED Entered STN: 12 May 2005

CN Piperazine, 1-[1-oxo-3-[(phenylsulfonyl)amino]propyl]-4-(3-phenyl-2-

propenyl) - (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C22 H27 N3 O3 S

SR Chemical Library

Supplier: Enamine

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

=>
Uploading C:\Documents and Settings\EBernhardt\My
Documents\Stnexp\Queries\Dhanoa-2.str

chain nodes :

7 10 11 12 14 15 16 20

ring nodes :

1 2 3 4 5 6

```
ring/chain nodes :
9 13 19
chain bonds :
2-14 5-19 7-14 9-10 9-19 10-11 10-12 10-13 14-15 14-16 19-20
ring bonds:
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
1-2 1-6 2-3 2-14 3-4 4-5 5-6 5-19 7-14 9-10 9-19 10-11 10-12 10-13
exact bonds :
14-15 14-16 19-20
Match level:
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 9:CLASS 10:CLASS 11:CLASS
 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 19:CLASS 20:CLASS
Generic attributes :
7:
Saturation
                      : Unsaturated
Number of Carbon Atoms: less than 7
Type of Ring System
                     : Monocyclic
Element Count :
Node 7: Limited
   0,00
    S, S0
   N, NO-2
       STRUCTURE UPLOADED
L3
=> s 13
SAMPLE SEARCH INITIATED 19:31:27 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -
                                     359 TO ITERATE
100.0% PROCESSED
                     359 ITERATIONS
                                                              24 ANSWERS
SEARCH TIME: 00.00.01
FULL FILE PROJECTIONS:
                       ONLINE **COMPLETE**
                       BATCH
                               **COMPLETE**
PROJECTED ITERATIONS:
                             6044 TO 8316
PROJECTED ANSWERS:
                              187 TO
                                          773
            24 SEA SSS SAM L3
L4
=> d 14 1 5 10
    ANSWER 1 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN
RN
     863586-88-3 REGISTRY
ED
     Entered STN: 21 Sep 2005
CN
     Benzenesulfonamide, N-[2-[4-(2-fluorophenyl)-1-piperazinyl]-2-(3-
     pyridinyl)ethyl]- (9CI) (CA INDEX NAME)
FS
     3D CONCORD
MF
     C23 H25 F N4 O2 S
SR
     Chemical Library
```

#### 10/768579

Supplier: Ambinter LC STN Files: CHEMCATS

$$\begin{array}{c|c} CH_2 & NH - S - Ph \\ \hline \\ N & CH & N & O \\ \hline \\ F & \end{array}$$

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- L4 ANSWER 5 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN
- RN 756441-87-9 REGISTRY
- ED Entered STN: 03 Oct 2004
- CN Benzenesulfonamide, 4-chloro-N-[3-[4-[(2,3,4-trimethoxyphenyl)methyl]-1-piperazinyl]propyl]- (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C23 H32 C1 N3 O5 S
- CI COM
- SR CA

- L4 ANSWER 10 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN
- RN 169946-03-6 REGISTRY
- ED Entered STN: 10 Nov 1995
- CN Benzamide, N-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-N-[(4-methoxyphenyl)sulfonyl]- (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C27 H30 F N3 O4 S
- CI COM
- SR CA
- LC STN Files: CA, CAPLUS

$$\begin{array}{c|c} & & & & \\ & & & \\ Ph-C & O \\ & & & \\ N & & & \\ \end{array}$$

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s 13 sss full

FULL SEARCH INITIATED 19:31:48 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 8054 TO ITERATE

100.0% PROCESSED 8054 ITERATIONS

551 ANSWERS

SEARCH TIME: 00.00.01

L5 551 SEA SSS FUL L3

=> save 15

ENTER NAME OR (END):ten768579/a

'TEN768579/A' IN USE

A single name cannot be used for two saved items at the same time. Enter "Y" if you wish to replace the current saved name with a new definition. Enter "N" if the current saved definition must be preserved. You may then reenter the SAVE command with a different saved name. Enter "DISPLAY SAVED" at an arrow prompt (=>) to see a list of your currently defined saved names.

REPLACE OLD DEFINITION? Y/(N):n

=> activate ten768579/a

L6 STR

TO 21K

L7 585 SEA FILE=REGISTRY SSS FUL L6

=> save 15

ENTER NAME OR (END):dhanoa/a

ANSWER SET L5 HAS BEEN SAVED AS 'DHANOA/A'

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 184.94 185.36

FULL ESTIMATED COST

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FILE COVERS 1907 - 27 Jan 2006 VOL 144 ISS 6 FILE LAST UPDATED: 26 Jan 2006 (20060126/ED)

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http://www.cas.org/infopolicy.html

=> s 15

L8 86 L5

=> d 18 1-86 bib abs fhitstr

- L8 ANSWER 1 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 2005:1260952 CAPLUS
- DN 144:36263
- TI Tetrahydroisoquinolylsulfonamide derivatives, their preparation and therapeutic use as H3 histamine receptor antagonists for the treatment of obesity, diabetes, and other conditions
- IN Diaz Martin, Juan Antonio; Jimenez Bargueno, Maria Dolores
- PA Sanofi-Synthelabo, Fr.
- SO Fr. Demande, 31 pp. CODEN: FRXXBL
- DT Patent
- LA French

FAN.CNT 1

21211	PATEN	r no.			KIN	D	DATE		-			ION	NO.		D	ATE	
PI	FR 28	70846			A1	_	2005	1202				5607			2	0040	525
	WO 20	051185	47		A1		2005	1215	1	WO 2	005-	FR12	79		2	0050	524
	W	: AE,	AG,	ΆL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE, GH, GM,			HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KP,	KR,	KZ,
		LC, LK, LR,			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,
		NG, NI, NO,			NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,
		SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,
		ZA,	ZM,	ZW													
	R	W: BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		AZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,
		MR,	NE,	SN,	TD,	TG											
PRAI GI	FR 20	04-560	7		Α		2004	0525									

Page 6

$$\begin{array}{c|c} R^2 & O & O \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

AB The invention concerns title compds. I [X = (Y)n; n = 1-6; Y = (un)substituted alkylidene; R1 = H, alkyl; R2 = H, cyclo/alkyl, etc.; B = NH2 and derivs.; (un)substituted pyrrolidin-2-yl, piperazin-1-yl, etc.] their acid addn. salts, hydrates and solvates. I are antagonists of histamine H3 receptors, and are useful therapeutically for the treatment of a wide variety of conditions, particularly obesity and diabetes. For instance, reacting N-[3-(diethylamino)propyl]-1,2,3,4-tetrahydroisoquinoline-7-sulfonamide (prepn. given) with cyclohexanecarboxaldehyde gave II in 62% yield. Compds. I bound to isolated rat brain H3 histamine receptors with Ki between 0.1 nM and 5.0 .mu.M. A feeding redn. assay in rats gave an AD50 of <10 mg/kg i.p. or p.o.

#### IT 870670-91-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; prepn. of tetrahydroisoquinolylsulfonamide derivs. as H3 histamine receptor antagonists)

## RN 870670-91-0 CAPLUS

CN 7-Isoquinolinesulfonamide, 1,2,3,4-tetrahydro-N-[3-[4-(phenylmethyl)-1-piperazinyl]propyl]-, hydrochloride (9CI) (CA INDEX NAME)

## ●x HCl

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN AN 2005:1024934 CAPLUS

- DN 143:460116
- TI Synthesis and evaluation of 18F-labeled dopamine D3 receptor ligands as potential PET imaging agents
- AU Hocke, Carsten; Prante, Olaf; Loeber, Stefan; Huebner, Harald; Gmeiner, Peter; Kuwert, Torsten
- CS Department of Nuclear Medicine, Erlangen, D-91054, Germany
- SO Bioorganic & Medicinal Chemistry Letters (2005), 15(21), 4819-4823 CODEN: BMCLE8; ISSN: 0960-894X
- PB Elsevier B.V.
- DT Journal
- LA English
- AB A series of fluoro-substituted aryl carboxamides was synthesized revealing high affinity for the dopamine D3 receptor. In contrast to 2-methoxy substitution, a 2,3-dichloro substitution pattern at the phenylpiperazine moiety induces a 10-fold increase of D3 affinity which is expressed by Ki values of 0.53, 1.1, and 9.0 nM. Applying arom. 18F-for-Br(Cl) substitution, high radiochem. yields between 76-82% were obtained. The most promising ligand was used as imaging agent of the D3 receptor in vitro. However, due to the lack of specific binding, further studies should aim at the development of radioligands with improved D3 receptor selectivity.
- IT 869383-35-7P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(calcd. LogP; prepn. of fluorine-18 piperazine aryl carboxamides as dopamine D3 receptor ligands for PET imaging)

- RN 869383-35-7 CAPLUS
- CN Benzenesulfonamide, 4-fluoro-N-[4-[4-(2-methoxyphenyl)-1-piperazinyl]butyl]- (9CI) (CA INDEX NAME)

## RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L8 ANSWER 3 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 2005:300395 CAPLUS
- DN 142:355054
- TI Preparation of amide derivatives as inhibitors of histone deacetylase
- IN Moradei, Oscar; Paquin, Isabelle; Leit, Silvana; Frechette, Sylvie; Vaisburg, Arkadii; Besterman, Jeffrey M.; Tessier, Pierre; Mallais, Tammy C.
- PA Methylgene, Inc., Can.
- SO PCT Int. Appl., 559 pp. CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 2

PATENT NO. KIND DATE APPLICATION NO. DATE

```
20050407
                                             WO 2004-US31591
                                                                    20040924
PΙ
     WO 2005030705
                          A1
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
PRAI US 2003-505884P
                          P
                                20030924
                                20031229
     US 2003-532973P
                          P
     US 2004-561082P
                          P
                                20040409
os
    MARPAT 142:355054
GI
```

AB Title compds. I [Arl = (un)satd.-, (un)substituted-mono or fused poly-cyclic hydrocarbyl optionally contg. 1-4 heteroatoms per ring; R1 = (un)substituted-mono-, -bi-, -tri-cyclic-aryl or -heteroaryl; R2, R3, and R4 independently = H, halo, amino, etc.; R5 and R6 independently = H, alkyl, aryl, etc.; x = 0-1; Y = any pharmaceutically acceptable chem. moiety consisting of 1 to 50 atoms with provisions] and their pharmaceutically acceptable salts, are prepd. and disclosed as inhibitors of histone deacetylase. Thus, e.g., II was prepd. by Suzuki coupling of 2-bromo-2-nitro-phenylamine (prepn. given) with 2-thiopheneboronic acid

CN

followed by carbonylation with 4-[3,4-dimethoxy-(phenylamino)-methyl]benzoic acid (prepn. given) and subsequent redn. The inhibitory capability of I towards antiproliferative activity of histone deacetylase enzyme was evaluated using 3-[4,5-dimethylthiazol-2-yl-2,5-diphenyltetrazolium] bromide (MTT) assay and it revealed that certain compds. of the invention had MTT IC 50 values in the range of below 1 up to 20 .mu.M. I as histone deacetylase inhibitors should prove useful in the treatment of diseases such as, but not limited to, cell proliferative disease, protozoal disease, and fungal disease.

IT 603954-02-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of amide derivs. as inhibitors of histone deacetylase)

RN 603954-02-5 CAPLUS

5-Pyrimidinecarboxamide, N-hydroxy-2-[4-[2-[(2-naphthalenylsulfonyl)amino]ethyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:300394 CAPLUS

DN 142:373563

TI Preparation of amide derivatives as inhibitors of histone deacetylase

IN Moradei, Oscar; Paquin, Isabelle; Leit, Silvana; Frechette, Sylvie;
 Vaisburg, Arkadii; Besterman, Jeffrey M.; Tessier, Pierre; Mallais, Tammy
 C.

PA Methylgene, Inc., Can.

SO PCT Int. Appl., 389 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

	PATE	ENT 1	NO.			KIN	D 1	DATE		1	APPL:	ICAT	ION 1	NO.		D	ATE	
PI	WO 2	2005				A1	-	2005	0407	1	WO 2	004-	US31	590		2	0040	
		W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE, GH, G		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	
		LK, LR, L		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
			NO, NZ, O		OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
			ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	ŬĠ,	US,	UZ,	VC,	VN,	ΥU,	ZA,	ZM,	ZW
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
			ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
			EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
	SI, SK, TR			TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	
	SN, TD, TG																	
PRAI	US 2	2003-	-505	884P		P		2003	0924									

US 2003-532973P P 20031229 US 2004-561082P P 20040409

OS MARPAT 142:373563

GI

$$\begin{array}{c|c}
 & R^{1} & R^{2} \\
 & R^{5} & R^{6} & R^{1} & R^{2} \\
 & R^{5} & R^{6} & R^{1} & R^{2} \\
 & R^{5} & R^{6} & R^{1} & R^{2} \\
 & R^{6} & R^{1} & R^{2} & R^{3} \\
\end{array}$$

AB Title compds. I [Arl = (un)satd.-, (un)substituted-mono or fused poly-cyclic hydrocarbyl optionally contq. 1-4 heteroatoms per ring; R1 = (un) substituted-mono-, -bi-, -tri-cyclic-aryl or -heteroaryl; R2, R3, and R4 independently = H, halo, amino, etc.; R5 and R6 independently = H, alkyl, aryl, etc.; x = 0-1; Y = any pharmaceutically acceptable chem.moiety consisting of 1 to 50 atoms with provisions] and their pharmaceutically acceptable salts, are prepd. and disclosed as inhibitors of histone deacetylase. Thus, e.g., II was prepd. by Suzuki coupling of 2-bromo-2-nitro-phenylamine (prepn. given) with 2-thiopheneboronic acid followed by carbonylation with 4-[3,4-dimethoxy-(phenylamino)methyl]benzoic acid (prepn. given) and subsequent redn. The inhibitory capability of I towards antiproliferative activity of histone deacetylase enzyme was evaluated using 3-[4,5-dimethylthiazol-2-yl-2,5diphenyltetrazolium] bromide (MTT) assay and it revealed that certain compds. of the invention had MTT IC 50 values in the range of below 1 up to 20 .mu.M. I as histone deacetylase inhibitors should prove useful in the treatment of diseases such as, but not limited to, cell proliferative disease, protozoal disease, and fungal disease.

Ι

#### IT 603954-02-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of amide derivs. as inhibitors of histone deacetylase)

RN 603954-02-5 CAPLUS

CN 5-Pyrimidinecarboxamide, N-hydroxy-2-[4-[2-[(2-naphthalenylsulfonyl)amino]ethyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & O \\
 & S - NH - CH_2 - CH_2 - N \\
 & O \\
 & O \\
\end{array}$$

$$\begin{array}{c|c}
 & C - NH - OH \\
 & O \\
\end{array}$$

# RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:220202 CAPLUS

DN 142:298126

TI Preparation of derivatives of pyridine, pyrimidine, quinoline, quinazoline, and naphthalene, useful as urotensin-II receptor antagonists

IN Wu, Chengde; Anderson, C. Eric; Bui, Huong; Dupre, Brian; Gao, Daxin; Holland, George W.; Kassir, Jamal; Li, Wen; Wang, Junmei

PA USA

SO U.S. Pat. Appl. Publ., 118 pp., Cont.-in-part of U.S. Ser. No. 783,916. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

PATI	ENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2	2005054850	 A1	20050310	US 2004-924181	20040823
US 2	2004186102	A1	20040923	US 2004-783916	20040220
PRAI US 2	2003-451089P	P	20030228		
US 2	2004-783916	A2	20040220		
OS MARI	PAT 142:298126				
GI					

$$\begin{array}{c|c} & & & \\ & & & \\ \text{Me}_2 \text{N} & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

AB The invention relates to a prepn. of derivs. of pyridine, pyrimidine, quinoline, quinazoline, and naphthalene of formula I [wherein: A is (hetero)aryl, benzoheteroaryl, pyridone, pyridazinone, and pyrimidone; Z is (CH2)1-6; R1 and R2 are independently H, alkyl, or R1 and R2 along with N can form pyrrolidone or piperazine, etc.; R3 is H, alkyl, or arylalkyl; X and Y are independently C or N; R4, R5, and R6 are independently selected from H, alkyl, (hetero)aryl, halogen, or alkoxy, etc.; L1 is a single bond or O, C(O), SO2, or (hetero) arene; L2 and L3 are independently selected from a single bond, CH2, C(O), SO2, or NH], useful as urotensin-II receptor antagonists. Thus, e.g., II was prepd. by substitution of a 4-halo-7-trifluoromethylquinoline with 3-(2-dimethylaminoethoxy)-4-chloroaniline. The prepd. compds. were tested for inhibition of human [1251]-urotensin-II binding to urotensin-II receptor and inhibition of human urotensin-II-induced Ca2+ mobilization (for instance, for II IC50 was 6.5 .mu.M).

#### IT 758713-94-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of derivs. of pyridine, pyrimidine, quinoline, quinazoline, and naphthalene, useful as urotensin-II receptor antagonists)
758713-94-9 CAPLUS

CN Benzenesulfonamide, 3-[(2-methyl-4-quinolinyl)amino]-N-[2-[4-(phenylmethyl)-1-piperazinyl]ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)

RN

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ N & &$$

#### ●2 HCl

L8 ANSWER 6 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:52602 CAPLUS

DN 143:305985

TI Pharmacomodulation of a sulfamide 5-HT6 receptor ligand

AU Renault, Jacques; Bernard, Aurelie; Brajeul, Solenn; Verhaeghe, Pierre; Butt, Sabrina; Fabis, Frederic; Dauphin, Francois; Uriac, Philippe; Rault, Sylvain

CS UPRES EA 2234- Institut de Chimie de Rennes, Faculte des Sciences Biologiques et Medicales, Universite de Rennes 1, Rennes, 35043, Fr.

SO Journal of Enzyme Inhibition and Medicinal Chemistry (2004), 19(6), 577-583

CODEN: JEIMAZ; ISSN: 1475-6366

PB Taylor & Francis Ltd.

DT Journal

LA English

A series of N-.omega.-aminoalkyl- or N-.omega.-amidinoalkyl-2,4,6-AB triisopropyl benzenesulfonamides has been synthesized and their resp. affinity indexes on 5-HT6 receptor detd. Amino-sulfonamide H2N(CH2)3NHSO2Ar (4; Ar = 2,4,6-triisopropylphenyl) was prepd. bypolymer-assisted sulfonation of 3-aminopropylcarbamate; diamino-sulfonamides H2CH2(CH2)nCH2NHCH2(CH2)mCH2NHSO2Ar (7, m = 2, n = 1; 8,M = 1, n = 2) were prepd. by sulfonation of the corresponding bis-N-Boc-protected spermidine. Sulfonation of 4-amino-1-butanol afforded HO(CH2)4NHSO2Ar (9), its nosylation and treatment with piperidine gave N-(4-piperidinobutyl)-NHSO2Ar (12). Sulfonation of 4-(ZC6H4)-piperazine-1butanamine gave ZC6H4N(CH2CH2)2N(CH2)4NHSO2Ar (19, 20; Z = 2-MeO, 4-F). Mercuridesulfuration of 1,3,4,5-tetrahydro-2H-1-benzazepine-2-thione in the presence of ArSO2NH(CH2)4NH2 (26) afforded cyclic amidine, N-[ArSO2NH(CH2)4]-3H-4,5-dihydrobenzazepine-2-amine (28). Compds. 4, 7-9, 12, 19, 20, 28 were tested for inhibition of [3H]LSD binding to human 5-HT6 receptors at 10-6 and 10-8 M concns. and compared to std. compd. 26 (JR435, Ki = 30 nM). This evaluation clearly showed that the compds. possessing an arylpiperazine moiety or an amidine function exhibited good affinity for the model.

## IT 864941-50-4P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. of aminoalkyl arenesulfonamides and sulfonylamido-alkyl amidines as human serotonin receptor pharmacomodulated ligands)

RN 864941-50-4 CAPLUS

CN Benzenesulfonamide, N-[4-(4-(2-methoxyphenyl)-1-piperazinyl]butyl]-2,4,6-tris(1-methylethyl)- (9CI) (CA INDEX NAME)

N— (CH<sub>2</sub>)<sub>4</sub>-NH-
$$\frac{0}{1-Pr}$$
OMe

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 7 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:1068075 CAPLUS

DN 142:168975

TI "Lead Hopping". Validation of Topomer Similarity as a Superior Predictor of Similar Biological Activities

AU Cramer, Richard D.; Jilek, Robert J.; Guessregen, Stefan; Clark, Stephanie J.; Wendt, Bernd; Clark, Robert D.

CS Tripos Discovery Research, Cornwall, EX23 8LY, UK

SO Journal of Medicinal Chemistry (2004), 47(27), 6777-6791 CODEN: JMCMAR; ISSN: 0022-2623

PB American Chemical Society

DT Journal

LA English

AΒ Two extensive studies quantifying the ability of topomer shape similarity to forecast a variety of biol. similarities are described. In a prospective trial of "lead hopping", using topomer similarity for virtual screening and queries from the patent literature, biol. assays of 308 selected compds. (representing 0.03% of those available, per assay type) yielded 11 successful "lead hops" in the 13 assays attempted. The hit rate averaged over all assays was 39% ("activity" defined as inhibition .gtoreq.20% at 10 .mu.M), significantly greater than an unexpectedly high neg. control hit rate of 15%. The av. "Tanimoto 2D fingerprint similarity" between query and "lead hop" structures (0.36) was little more than the Tanimoto similarity between random drug-like structures. Topomer shape and Tanimoto 2D fingerprint similarities were also compared retrospectively, in their tendencies to conc. together potential and actual drugs reported to belong to the same "activity class", for twenty classes. Among the most similar 3% of structures (corresponding to ".gtoreq.0.85 Tanimoto" for these structures), an av. of 62% of the topomer similar selection possessed a near neighbor belonging to the same activity class, roughly a one-third superiority over the "Tanimoto .gtoreq. 0.85" selection contg. 48% actives in avoiding false positives. Conversely, the least similar 75% of structures contained 0.3% actives for topomer similarity vs. 1.0% actives for Tanimoto 2D fingerprint similarity, a 3-fold superiority for topomers in avoiding false negatives. IT 831238-74-5

RL: PAC (Pharmacological activity); BIOL (Biological study)
(validation of topomer similarity as a superior predictor of similar biol. activities of "Lead hopping")

RN 831238-74-5 CAPLUS

CN 1-Naphthalenesulfonamide, 5-(dimethylamino)-N-[4-[4-(3-methoxyphenyl)-1-piperazinyl]butyl]- (9CI) (CA INDEX NAME)

RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 8 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:916838 CAPLUS

DN 142:85846

TI Molecular docking and 3D QSAR studies on 1-amino-2-phenyl-4-(piperidin-1-yl)-butanes based on the structural modeling of human CCR5 receptor

AU Xu, Yong; Liu, Hong; Niu, Chunying; Luo, Cheng; Luo, Xiaomin; Shen, Jianhua; Chen, Kaixian; Jiang, Hualiang

CS Drug Discovery and Design Center, State Key Laboratory of Drug Research, Shanghai Institute of Materia Medica, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, Shanghai, 201203, Peop. Rep. China

SO Bioorganic & Medicinal Chemistry (2004), 12(23), 6193-6208 CODEN: BMECEP; ISSN: 0968-0896

PB Elsevier Ltd.

DT Journal

LA English

AB In the present study, we have used an approach combining protein structure modeling, mol. dynamics (MD) simulation, automated docking, and 3D QSAR analyses to investigate the detailed interactions of CCR5 with their antagonists. Homol. modeling and MD simulation were used to build the 3D model of CCR5 receptor based on the high-resoln. x-ray structure of bovine rhodopsin. A series of 64 CCR5 antagonists, 1-amino-2-phenyl-4-(piperidin-1-yl)-butanes, were docked into the putative binding site of the 3D model of CCR5 using the docking method, and the probable interaction model between CCR5 and the antagonists were obtained. The predicted binding affinities of the antagonists to CCR5 correlate well with the antagonist activities, and the interaction model could be used to explain many

mutagenesis results. All these indicate that the 3D model of antagonist-CCR5 interaction is reliable. Based on the binding conformations and their alignment inside the binding pocket of CCR5, three-dimensional structure-activity relation (3D QSAR) analyses were performed on these antagonists using comparative mol. field anal. (CoMFA) and comparative mol. similarity anal. (CoMSIA) methods. Both CoMFA and CoMSIA provide statistically valid models with good correlation and predictive power. The q2(r2cross) values are 0.568 and 0.587 for CoMFA and CoMSIA, resp. The predictive ability of these models was validated by six compds. that were not included in the training set. Mapping these models back to the topol. of the active site of CCR5 leads to a better understanding of antagonist-CCR5 interaction. These results suggest that the 3D model of CCR5 can be used in structure-based drug design and the 3D QSAR models provide clear guidelines and accurate activity predictions for novel antagonist design.

IT 209160-71-4

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(mol. docking and QSAR studies on piperidinylbutanes based on structural modeling of human CCR5 receptor)

RN 209160-71-4 CAPLUS

CN Benzenesulfonamide, N-[(2S)-2-(3-chlorophenyl)-4-(4-phenyl-1-piperazinyl)butyl]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:773121 CAPLUS

DN 141:424159

TI Novel 5-HT7 Receptor Inverse Agonists. Synthesis and Molecular Modeling of Arylpiperazine- and 1,2,3,4-Tetrahydroisoquinoline-Based Arylsulfonamides

AU Vermeulen, Erik S.; Van Smeden, Marjan; Schmidt, Anne W.; Sprouse, Jeffrey S.; Wikstroem, Haakan V.; Grol, Cor J.

CS Department of Medicinal Chemistry, Center for Pharmacy, State University of Groningen, Groningen, NL-9713, Neth.

SO Journal of Medicinal Chemistry (2004), 47(22), 5451-5466 CODEN: JMCMAR; ISSN: 0022-2623

PB American Chemical Society

DT Journal

LA English

AB A series of arylpiperazine- and 1,2,3,4-tetrahydroisoquinoline-based

arylsulfonamides was synthesized and evaluated for their interactions with the constitutively active 5-HT7 receptor. Effects on basal adenylate cyclase activity were measured using HEK-293 cells expressing the rat 5-HT7. All ligands produced a decrease of adenylate cyclase activity, indicative of their inverse agonism. Addnl., computational studies with a set of 22 inverse agonists, including these novel inverse agonists and inverse agonists known from literature, resulted in a pharmacophore model and a CoMFA model (R2 = 0.97, SE = 0.18). Docking of inverse agonists at the binding site of a model of the helical parts of the 5-HT7 receptor, based on the .alpha. carbon template for 7-TM GPCRs, revealed interesting mol. interactions and a possible explanation for obsd. structure-activity relationships.

IT 793671-98-4P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and mol. modeling of arylpiperazinylalkyl- and

1,2,3,4-tetrahydroisoquinolinylalkylarylsulfonamides as 5-HT7 receptor inverse agonists)

RN 793671-98-4 CAPLUS

CN Benzenesulfonamide, N-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-4-methyl- (9CI) (CA INDEX NAME)

# RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 10 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:754408 CAPLUS

DN 141:277630

TI A preparation of derivatives of pyridine, pyrimidine, quinoline, quinazoline, and naphthalene, useful as urotensin-II receptor antagonists

IN Wu, Chengde; Anderson, C. Eric; Bui, Huong; Gao, Daxin; Holland, George W.; Kassir, Jamal; Li, Wen; Wang, Junmei; Dupre, Brian

PA Encysive Pharmaceuticals Inc., USA

SO PCT Int. Appl., 110 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

	PAT	CENT :	NO.			KIN	D.	DATE			APPL:	ICAT:	ION I	NO.		D	ATE	-
							-											
PI	WO	2004	0781	14		A2		2004	0916	1	WO 2	004-	US51	50		20	00402	220
	WO	2004		<b>A3</b>		2005	0217											
		WO 2004078114 W: AE, AG, AL CN, CO, CR				AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
	CN, CO, CR,		CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,			
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,
	RW: BW, GH, GM BG, CH, CY			CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	

MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2517166 CA 2004-2517166 AA 20040916 20040220 EP 2004-713383 EP 1603884 20051214 **A2** 20040220 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK PRAI US 2003-451089P Ρ 20030228 WO 2004-US5150 W 20040220 os MARPAT 141:277630 GI

$$Me_2N$$
 $CF_3$ 
 $N$ 
 $N$ 
 $N$ 
 $N$ 
 $N$ 
 $N$ 

AB The invention relates to a prepn. of derivs. of pyridine, pyrimidine, quinoline, quinazoline, and naphthalene of formula I [wherein: A is (hetero)aryl, benzoheteroaryl, pyridone, pyridazinone, and pyrimidone; Z is (CH2)1-6; Rl and R2 are independently H, alkyl, or Rl and R2 along with N can form pyrrolidone or piperazine, etc.; R3 is H, alkyl, or arylalkyl; X and Y are independently C or N; R4, R5, and R6 are independently selected from H, alkyl, (hetero)aryl, halogen, or alkoxy, etc.; L1 is a single bond or O, C(O), SO2, or (hetero)arene; L2 and L3 are independently selected from a single bond, CH2, C(O), SO2, or NH], useful as urotensin-II receptor antagonists. The prepd. compds. were tested for inhibition of human [125I]-urotensin-II binding to urotensin-II receptor and inhibition of human urotensin-II-induced Ca2+ mobilization (for instance, for II IC50 was 6.5 .mu.M).

#### IT 758713-94-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of derivs. of pyridine, pyrimidine, quinoline, quinazoline, and naphthalene, useful as urotensin-II receptor antagonists)

RN 758713-94-9 CAPLUS

CN Benzenesulfonamide, 3-[(2-methyl-4-quinolinyl)amino]-N-[2-[4-(phenylmethyl)-1-piperazinyl]ethyl]-, dihydrochloride (9CI) (CA INDEX

NAME)

$$\begin{array}{c|c}
& & & \\
& & & \\
& & & \\
N - CH_2 - CH_2 - NH - S \\
& & & \\
\end{array}$$

## ●2 HCl

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L8 ANSWER 11 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN
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AN 2004:675719 CAPLUS

DN 141:207226

TI Preparation of arylpiperazinyl sulfonamides as 5-HT, in particular 5-HT1, receptor agonists and antagonists for treating CND disorders, especially anxiety and related diseases

IN Dhanoa, Dale S.; Chen, Dongli; Becker, Oren; Noiman, Silvia; Cheruku, Srinivasa Rao; Marantz, Yael; Sharadendu, Anurag; Shachem, Sharon; Heifetz, Alexander; Mohanty, Pradyumna; Inbal, Boaz; Fichman, Merav; Nudelman, Raphael; Bar-Haim, Shay

PA Predix Pharmaceuticals Holdings, Inc., USA

SO PCT Int. Appl., 125 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

CAN.		ENT 1	NO.			KIN	)	DATE			APPL:	ICAT:	ION 1	NO.		Dž	ATE	
PI	WO	2004	0697	94				2004		,	WO 2	004-	US28	 58		20	0040	202
	WO	2004	0697	94		<b>A3</b>		2004	1104									
	WO	2004	0697	94		C2		2004	1209									
	WO	2004	0697	94		B1		2005	0127									
		W: AE, AG, CN, CO,		AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
						HR,												
		•				LT,												
		RW:				KE,												
			BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,
			MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,
			GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG								
	US	2004	2201	92		<b>A</b> 1		2004	1104		US 2	004-	7685	79		2	0040	130
	US 2004220192 CA 2513915				AA		2004	0819		CA 2	004-	2513	915		2	0040	202	
	EP 1592425				A2		2005	1109		EP 2	004-	7074	09		2	0040	202	
		R:	AT,	BE.	CH.	DE,	DK.	ES,	FR,	GB,	GR.	IT.	LI.	LU.	NL.	SE.	MC.	PT.
	R: AT, BE, IE, SI,																•	

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PRAI US 2003-443988P
                           Ρ
                                 20030131
                           Р
                                 20030328
     US 2003-458297P
                           Р
                                 20030916
     US 2003-503520P
     US 2004-768579
                           A2
                                 20040130
     WO 2004-US2858
                           W
                                 20040202
os
     MARPAT 141:207226
GI
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AB Title compds. I [wherein R1 = (un)substituted alkyl-aryl, cyclo/alkyl; R2, R3 = independently H, lower alkyl, cycloalkyl, trihalomethyl, halo, etc.; Z = N or C; X = (CH2)m; m = 0-6; Y = (CH2)n; n = 1-6; W = (CH2)p; p = 0-4; N together with one or several carbons from Y = 4-, 5-, 6- or 7-membered hetero/cyclic ring; their pharmaceutically acceptable salts and/or esters, and provided that when p=o, R1 is not (un)substituted aryl and R2, R3 are independently other than alkoxy/phenyl] were prepd. as 5-HT, in particular 5-HT1, receptor agonists and antagonists for treating anxiety and related disorders. Three biol. examples are given. For example, II.bul.2HCl was prepd., in 3 steps, from 1-amino-4-butanol, tosyl chloride, 1-(3-nitrophenyl)piperazine, and HCl. Selected I bound to 5-HT1A receptor with Ki values in the 1.3 - 26 nM range. Thus, I are useful for treating central nervous system disorders such as generalized anxiety disorder, ADD/ADHD, neural injury, stroke, and migraine.

IT **690949-14-5P**, 4-Methyl-N-[4-[4-(pyrimidin-2-yl)piperazin-1-yl]butyl]benzenesulfonamide

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(5-HTl agonist; prepn. of arylpiperazinyl sulfonamides as 5-HT, in particular 5-HTl, receptor agonists and antagonists for treating anxiety and related disorders)

RN 690949-14-5 CAPLUS

CN Benzenesulfonamide, 4-methyl-N-[4-[4-(2-pyrimidinyl)-1-piperazinyl]butyl]-(9CI) (CA INDEX NAME)

L8 ANSWER 12 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:34787 CAPLUS

DN 140:385496

TI Three-dimensional quantitative structure-activity relationship analyses of piperidine-based CCR5 receptor antagonists

AU Song, Minghu; Breneman, Curt M.; Sukumar, N.

CS Department of Chemistry, Rensselaer Polytechnic Institute, Troy, NY, 12180, USA

SO Bioorganic & Medicinal Chemistry (2004), 12(2), 489-499 CODEN: BMECEP; ISSN: 0968-0896

PB Elsevier Ltd.

DT Journal

LA English

AB The CCR5 chemokine receptor has recently been found to play a crucial role in the viral entry stage of HIV infection and has therefore become an attractive potential target for anti-HIV therapeutics. The lack of CCR5 crystal structure data has impeded the development of structure-based CCR5 antagonist design. In this paper, we compare two three-dimensional Quant. Structure-Activity Relationship (3D-QSAR) methods: Comparative Mol. Field Anal. (CoMFA) and Comparative Mol. Similarity Indexes Anal. (CoMSIA) on a series of piperidine-based CCR5 antagonists as an alternative approach to investigate the interaction between CCR5 antagonists and their receptor. Superimposition of antagonist structures was performed using two alignment rules: at./centroid rms fit and rigid body field fit techniques. The 3D QSAR models were derived from a training set of 72 compds., and were found to have predictive capability for a set of 19 holdout test compds. The resulting contour maps produced by the best CoMFA and CoMSIA models were used to identify the structural features relevant to biol. activity in this series of compds. Further analyses of these interaction-field contour maps also showed a high level of internal consistency.

IT 209160-71-4

RL: PAC (Pharmacological activity); PRP (Properties); BIOL (Biological study)

(QSAR CoMFA and CoMSIA analyses of piperidine-based CCR5 receptor antagonists)  $\begin{tabular}{ll} \end{tabular} \begin{tabular}{ll} \end{tabular}$ 

RN 209160-71-4 CAPLUS

CN Benzenesulfonamide, N-[(2S)-2-(3-chlorophenyl)-4-(4-phenyl-1-piperazinyl)butyl]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 13 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:875291 CAPLUS

DN 139:350751

TI Preparation of pyrazolo[1,5-a]pyrimidine derivatives as NAD(P)H oxidase inhibitors

IN Seno, Kaoru; Nishi, Koichi; Matsuo, Yoshiyuki; Fujishita, Toshio

PA Shionogi & Co., Ltd., Japan

SO PCT Int. Appl., 240 pp.

MARPAT 139:350751

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. \_\_\_\_ PΙ WO 2003091256 **A**1 20031106 WO 2003-JP5024 20030418 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2483306 20031106 CA 2003-2483306 AA 20030418 EP 1505068 **A1** 20050209 EP 2003-717663 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK 20030418 BR 2003009475 Α 20050301 BR 2003-9475 PRAI JP 2002-121519 20020423 Α 20030418 WO 2003-JP5024 W

os GI

$$R^2$$
 $N$ 
 $N$ 
 $R^4$ 
 $R^5$ 
 $R^4$ 

AB Title compds. I (R1, R2, R3, R4, R5 = H, halo, alkyl, alkenyl, alkynyl, cycloalkyl,, aryl, heteroaryl, etc.) and their pharmaceutically acceptable salts, useful in the prevention of or treatments for diseases relating to NAD(P)H, are prepd. Thus, N-2-cyclohexylphenyl 3-(3-chlorophenyl)pyrazolo[1,5-a]pyrimidin-5-amide was prepd. in several steps from Et 7-chloropyrazolo[1,5-a]pyrimidine-5-carboxylate.

IT 619304-62-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of pyrazolo[1,5-a]pyrimidine derivs. as NAD(P)H oxidase inhibitors)

RN 619304-62-0 CAPLUS

CN Pyrazolo[1,5-a]pyrimidine-5-carboxamide, 3-(3-chlorophenyl)-N-[2-[4-[3-[(methylsulfonyl)amino]propyl]-1-piperazinyl]phenyl]- (9CI) (CA INDEX NAME)

RE.CNT 109 THERE ARE 109 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 14 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:796691 CAPLUS

DN 139:307788

TI Preparation of 5-cyanopyrimidine derivatives as anti-inflammatory agents

IN Machii, Daisuke; Yamaura, Yosuke; Arai, Hitoshi; Yanagawa, Koji; Ohshima, Etsuo; Kawanabe, Ari; Iwase, Miho; Kobayashi, Katsuya; Sato, Takashi; Miki, Ichiro

PA Kyowa Hakko Kogyo Co., Ltd., Japan

SO PCT Int. Appl., 169 pp. CODEN: PIXXD2

DT Patent LA Japanese FAN.CNT 1

	PATENT	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D	ATE	
PI	WO 2003	0828	 55		A1	_	2003	1009	1	WO 2	003-	JP40	09		2	0030	328
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		co,	CR,	CU,	CZ,	DE,	DK,	DM,	.DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
	GM, HR, HU			HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	KZ,	LC,	LK,	LR,	LS,
	LT, LU, LV			LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	PH,
	PL, PT, RC			RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW						
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
PRAI					Α		2002	0328									
OS GI	MARPAT	88															

$$R^1$$
 $NC$ 
 $R^2$ 
 $R^2$ 

The title pyrimidine compds. I [wherein Rl and R3 = independently H, OH, halo, (un) substituted alkyl, alkoxy, alkylthio, aryl, aralkyl, or amino; R2 = (un) substituted amino] or ammonium salts or pharmaceutically acceptable salts thereof are prepd. as anti-inflammatory agents. For example, the compd. II was prepd. in a multi-step synthesis. II showed 97% inhibitory activity against thymus and activation-regulated chemokine (TARC) Hut78 cells at 1 .mu.M. Formulations contg. I as an active ingredient were also described.

IT 611203-73-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; prepn. of cyanopyrimidine derivs. as anti-inflammatory agents)

RN 611203-73-7 CAPLUS

CN Methanesulfonamide, N-[2-[4-[5-cyano-4-[[(2,4-difluorophenyl)methyl]amino]-2-pyrimidinyl]-1-piperazinyl]ethyl]-N-methyl- (9CI) (CA INDEX NAME)

# RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 15 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:737724 CAPLUS

DN 139:276820

TI Preparation of sulfonylaminopiperidine derivatives as inhibitors of histone deacetylase

IN Van Emelen, Kristof; Backx, Leo Jacobus Jozef; Van Brandt, Sven Franciscus Anna; Angibaud, Patrick Rene; Pilatte, Isabelle Noeelle Constance; Verdonck, Marc Gustaaf Celine; De Winter, Hans Louis Jos

PA Janssen Pharmaceutica N.V., Belg.

SO PCT Int. Appl., 91 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 8

	PATE	ENT N	10.			KINI	)	DATE				ICAT				D2	ATE	
ΡI	WO 2	20030	7640	)1		A1		2003	0918			003-				20	0030	311
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			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
		PL, PT, RG UA, UG, US			RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,
	UA, UG, U			US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW							
	RW: GH, GM, KI		KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,		
	KG, KZ, MD,		MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,		
	•		FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
			BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
	CA 2	24761	L86			AA		2003	0918		CA 2	003-	2476	186		20	0030	311
	EP 1	4853	354			<b>A1</b>		2004	1215		EP 2	003-	7438	74		20	030:	311
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK	
	BR 2	R 2003007599						2005	0201		BR 2	003-	7599			20	030:	311
	US 2	20051	1713	47		A1		2005	0804	1	US 2	003-	5071	59		20	030:	311
	JP 2	20055	52670	63		Т2		2005	0908		JP 2	003-	5746	22		20	030:	311
	NO 2	20040	00422	24		Α		2004	1005	1	NO 2	004-	4224			20	0041	005

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PRAI US 2002-363799P P 20020313

WO 2002-EP14481 A 20021218

WO 2002-EP14081 A 20021218

WO 2003-EP2517 W 20030311

OS MARPAT 139:276820

GI
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$$\begin{array}{c|c}
R^{1} & Q-X & \downarrow & (CH_{2})_{n} \\
\downarrow & \downarrow & Z-(CHR^{3})_{p}-NR^{5}-SO_{2}-A
\end{array}$$

The title compds. I [Q, X, Y, Z = N, (un) substituted CH; Rl = (un) substituted CONH2, NHCHO, COalkanediylSH, CONHOH, NHCOC:NHOH or other Zn-chelating group; R2 = H, halogen, OH, amino, NO2, alkyl, alkoxy, CF3, dialkylamino, NHOH, naphthalenylsulfonylpyrazinyl; R3 = H, aryl; R4 = H, OH, amino, (un) substituted alkyl, alkoxy, CONH2, CO2H; R5 = H, alkyl, cycloalkyl, hydroxyalkyl, alkoxyalkyl, dialkylaminoalkyl, aryl; A = (un) substituted Ph, cyclohexyl, heterocyclic, heteroaryl, naphthyl; n = 0-3; p = 0-4] were prepd. for use as histone deacetylase inhibitors in the treatment of proliferative diseases. Thus, the sulfonylaminopiperidine II was prepd. from Et 4-aminopiperidine-1-carboxylate, 2-naphthalenesulfonyl chloride, and Et 2-methylsulfonylpyrimidine-5-carboxylate in 6 steps. II had pIC50 for inhibition of histone deacetylase of 6.523 and for antiproliferative activity against A2780 cells of 5.277.

Ι

II

## IT 603954-03-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of sulfonylaminopiperidine derivs. as inhibitors of histone deacetylase)

RN 603954-03-6 CAPLUS

CN 5-Pyrimidinecarboxamide, N-hydroxy-2-[4-[2-[(2-naphthalenylsulfonyl)amino]ethyl]-1-piperazinyl]-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 603954-02-5 CMF C21 H24 N6 O4 S

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CM 2

CRN 76-05-1 CMF C2 H F3 O2

# RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 16 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:656757 CAPLUS

DN 139:197507

TI Preparation of piperazine derivatives as anti-inflammatory agents

IN Dowle, Michael Dennis; Eldred, Colin David; Johnson, Martin Redpath; Redfern, Tracy Jane; Robinson, John Edward; Trivedi, Naimisha; Weller, Victoria

PA Glaxo Group Limited, UK

SO PCT Int. Appl., 80 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 1

ran.	PATE	-	۰.00			KIN	<b>D</b> :	DATE						NO.		D	ATE	
PI	WO 2	0030	0687	59		A1	_	2003	0821							2	0030	210
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			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,
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\	EP 1	.480	959			<b>A1</b>		2004	1201	1	EP 2	003-	7395	56		2	0030	210
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	IE, SI, LT					LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK	
	JP、2005528342							2005	0922		JP 2	003-	5678	89		2	0030	210
PRAI	PRAI GB 2002-3299																	
	WO 2	003-	-GB5	83		W		2003	0210									

OS MARPAT 139:197507

GI

$$R^{2}$$
 $Y-N$ 
 $R^{4}$ 
 $R^{6}$ 
 $R^{6}$ 
 $R^{5}$ 
 $R^{6}$ 

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AB Title compds. I [R1 = (un)substituted (hetero)aryl; R2 = H, alkyl, alkenyl, cycloalkyl; X, Y = bond or (CH2)1-2 where X and Y do not both represent a bond; R3 = alkyl, alkenyl, (hetero)aryl, etc.; R4-5 = H, alkyl, carboxy, etc.; R6 = (hetero)aryl] are prepd. For instance, 4-[(3,4-dichlorophenyl)methyl]-.alpha.-(1-methylethyl)-1-piperazineethaneamine is reacted with 2-chlorobenzoxazole (i-PrOH, i-Pr2NEt, reflux, 18 h),to give II. Compds. of the invention have functional pKi values in the range of 5.5-7.5 in the CCR-3 eosinophil chemotaxis assay. I are useful as anti-inflammatory agents.

IT 583868-41-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of piperazine CCR-3 antagonists useful as anti-inflammatory agents)

RN 583868-41-1 CAPLUS

CN Methanesulfonamide, N-[(5R)-5-(2-benzoxazolylamino)-6-[4-[(3,4-dichlorophenyl)methyl]-1-piperazinyl]hexyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 17 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:91523 CAPLUS

DN 139:303965

TI Interaction of singlet molecular oxygen with double fluorescent and spin sensors

AU Bilski, P.; Hideq, K.; Kalai, T.; Bilska, M. A.; Chiqnell, C. F.

CS Laboratory of Pharmacology and Chemistry, NIEHS/NIH, Research Triangle Park, NC, USA

SO Free Radical Biology & Medicine (2003), 34(4), 489-495 CODEN: FRBMEH; ISSN: 0891-5849

PB Elsevier Science Inc.

DT Journal

LA English

AB Double fluorescent and spin sensors were recently used to detect transient oxidants via simultaneous fluorescence change and prodn. of the nitroxide radical detected by ESR. One such oxidant, singlet mol. oxygen (102), was detected in thylakoid membrane using these probes. In the present study, we investigated the total (phys. and chem.) quenching of 102 phosphorescence by sensors composed of the 2,5-dihydro-2,2,5,5-tetramethyl-1H-pyrrole moiety attached to xanthene or dansyl fluorophores. We found that the quenching rate consts. were in the range (2-7) .times. 107 M-1s-1 in acetonitrile and D2O. Quenching of 102 is usually an additive process in which different functional groups may contribute. We estd. that the 102 quenching by the amine fragments was ca. one to two orders of magnitude lower than that for the complete mols. Our data suggest that the incorporation of a fluorescent chromophore results in addnl. strong quenching of 102, which may in turn decrease the nitroxide yield via the 102 chem. path, possibly having an effect on quant. interpretations. We have also found that probes with the dansyl fluorophore photosensitized 102 upon UV excitation with the quantum yield of 0.087 in acetonitrile at 366 nm. This result shows that care must be taken when the dansyl-based sensors are used in expts. requiring UV irradn. We hope that our results

will contribute to a better characterization and wider use of these novel double sensors.

IT 505074-73-7, HO 2780

RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); BIOL (Biological study); PROC (Process); USES (Uses)

(kinetics of phosphorescence quenching of singlet mol. oxygen by double fluorescent and spin sensors)

RN 505074-73-7 CAPLUS

CN 1-Naphthalenesulfonamide, N-[2-[4-[(2,5-dihydro-2,2,5,5-tetramethyl-1H-pyrrol-3-yl)methyl]-1-piperazinyl]ethyl]-5-(dimethylamino)- (9CI) (CA INDEX NAME)

PAGE 2-A

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 18 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN AN 2002:718019 CAPLUS

#### 10/768579

- DN 138:287634
- TI Synthesis and structure optimization of double (fluorescent and spin) sensor molecules
- AU Kalai, Tamas; Hankovszky, Olga H.; Hideg, Eva; Jeko, Jozsef; Hideg, Kalman
- CS Institute of Organic and Medicinal Chemistry, University of Pecs, Pecs, H-7643, Hung.
- SO ARKIVOC (Gainesville, FL, United States) [online computer file] (2002), (3), 112-120
  CODEN: AGFUAR

URL: http://www.arkat-usa.org/ark/journal/2002/Lloyd/DL-297G/DL-297G.pdf

- PB Arkat USA Inc.
- DT Journal; (online computer file)
- LA English
- OS CASREACT 138:287634
- AB Synthesis and fluorescence properties of stable nitroxide free radicals (101, 11a, 12a, 14a, 20a, 21a) and their amine (10b, 11b, 12b, 14b, 20b, 21b) precursors covalently linked to dansyl or 3- and 4-aminophthalimide are reported. The best intramol. quenching is achieved when the fluorophore and the nitroxide are in the closest possible position.
- IT 505074-72-6P
  - RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (synthesis and fluorescence of nitroxide free radicals for fluorescent and spin sensor mols.)
- RN 505074-72-6 CAPLUS
- CN 1H-Pyrrol-1-yloxy, 3-[[4-[2-[[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]amino]ethyl]-1-piperazinyl]methyl]-2,5-dihydro-2,2,5,5-tetramethyl- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A



## RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 19 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:444494 CAPLUS

DN 137:28321

TI Use of certain isoquinolinesulfonyl compounds for the treatment of glaucoma and ocular ischemia

IN Hellberg, Mark R.; Kapin, Michael A.; Desantis, Louis M., Jr.

PA Alcon Laboratories, Inc., USA

SO U.S., 11 pp., Cont.-in-part of U.S. Ser. No. 77,575. CODEN: USXXAM

DT Patent

LA English

FAN. CNT 2

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	PA:	CENT :	NO.			KINI	)	DATE	}	AP	PLICAT	ION 1	NO.		D.	ATE		
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PI	US	6403	590			B1		2002	0611	US	2001-	9193	01		20	010	731	
	WO	9723	222			<b>A1</b>		1997	0703	WO	1996-	US20	197		19	99612	220	
		W:	ΑU,	CA,	CN,	JP,	KR,	MX,	US									
		RW:	AT,	BE,	CH,	DE,	DK,	ES,	FI,					LU,	MC,	NL,	PT,	SE
	RW: AT, BE, C US 6271224					В1		2001	0807	US	1999-	7757	5		19	990:	119	
PRAI	US 1995-9351P					P		1995	1221									
	WO	1996	-US2	0197		W		1996	1220									
	US	1999	-775	75		A2		1999	0119									

OS MARPAT 137:28321

AB Isoquinolinesulfonyl compds. are used in ophthalmic compns. to treat glaucoma or other ischemic-borne ocular disorders, e.g. retinopathies or optic neuropathies. These compds. vasodilate ocular blood vessels, lower IOP and prevent or reduce the progression of visual field loss. Prepn. and testing of 1-(5-isoquinolinesulfonyl)-2,5-dimethylpiperazine are described.

IT 192712-45-1

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(isoquinolinesulfonyl compds. for treatment of glaucoma and ocular ischemia)

RN 192712-45-1 CAPLUS

CN 5-Isoquinolinesulfonamide, N-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

# RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 20 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:325400 CAPLUS

DN 137:73653

TI Characteristics of ATP-induced current through P2X7 receptor in NG108-15 cells: unique antagonist sensitivity and lack of pore formation

AU Watano, Tomokazu; Matsuoka, Isao; Kimura, Junko

CS Department of Pharmacology, Fukushima Medical University School of Medicine, Fukushima, 960-1295, Japan

SO Japanese Journal of Pharmacology (2002), 88(4), 428-435 CODEN: JJPAAZ; ISSN: 0021-5198

PB Japanese Pharmacological Society

DT Journal

LA English

AB ATP activates the mouse P2X7 receptor and induces a nonselective-cation current in NG108-15 cells. We investigated the effects of five receptor antagonists on the ATP-induced nonselective-cation current through P2X7 receptor (INS.cntdot.P2X7) in NG108-15 cells. Nonselective P2 receptor antagonists, RB-2, PPADS and suramin inhibited the INS.cntdot.P2X7 with IC50 values of 4.3, 53 and 40  $\cdot$ mu.M, resp. However, KN-04, which is a potent antagonist of human P2X7 receptors but is not that of rat P2X7 receptors, had only a weak blocking effect. Furthermore, oxidized-ATP (300 .mu.M), an antagonist of the P2X7 receptor-mediated pore-formation, did not affect the INS.cntdot.P2X7. Prolonged ATP application did not increase the membrane permeability to large mols., N-methyl-D-glucamine or Yo-Pro-1, indicating that pore-formation was not promoted by the P2X7 receptor activation in NG108-15 cells. These results suggest that antagonist sensitivities and pore-forming properties of the P2X7 receptors in NG108-15 cells are different from those of other cells types.

IT 129695-80-3, KN-04
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(ATP-induced current through P2X7 receptor in NG108-15 cells with unique antagonist sensitivity and lack of pore formation)

RN 129695-80-3 CAPLUS

CN 5-Isoquinolinesulfonic acid, 4-[2-[(5-isoquinolinylsulfonyl)amino]-3-(4-phenyl-1-piperazinyl)propyl]phenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

# RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 21 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:314395 CAPLUS

DN 136:335540

TI Use of PDE V inhibitors for improved fecundity in mammals

IN Westbrook, Simon Lempriere; Zanzinger, Johannes Friedrich

PA Pfizer Limited, UK; Pfizer Inc.

SO Eur. Pat. Appl., 20 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.			KIN	D	DATE	;		APP	LIC	ATI	ON I	ю.		D.	ATE		
PI	EP 119				A2 A3			0424		EP	200	1-3	086	84		2	0011	011
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, I	Γ,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, TI	R						
	CA 235	9383			AA		2002	0420		CA	200	1-2	359	383		2	0011	018
	US 200	30180	36		A1		2003	0123		US	200	1-9	824	45		2	0011	018
	US 654	8508			B2		2003	0415										
	AU 200	10815	23		<b>A</b> 5		2002	0502		AU	200	1-8	152	3		2	0011	019
	JP 200	22203	46		A2		2002	0809		JΡ	200	1-3	221	95		2	0011	019
	ZA 200	10086	17		Α		2003	0422		ZA	200	1-8	617			2	0011	019
	NZ 514	947			Α		2005	0324		NZ	200	1-5	149	47		2	0011	019
	US 200	30180	37		A1		2003	0123		US	2002	2-2	295	34		2	0020	827
	US 674	3799			B2		2004	0601										
	US 200	41670	95		A1		2004	0826		US	2004	4-7	788	66		2	0040	212
PRAI	GB 200	0-257	82		A		2000	1020										
	US 200	0-253	338P		P		2000	1128										
	US 200	1-982	445		A1		2001	1018										
	US 200	2-229	534		A1		2002	0827										

AB The invention relates to the use of a cyclic guanosine 3',5'-monophosphate phosphodiesterase type five (cGMP PDE V) inhibitor for increasing fecundity in a mammal by one or more of (a) promoting the growth of an oocyte, zygote, blastocyst, embryo and/or fetus, (b) increasing the rate or probability of survival of an embryo and/or fetus and (c) increasing the birth wt. of a progeny, or for increasing milk productivity. I.v. and tablet formulations are exemplified. Formulations and packs contg. the PDE V inhibitors for pharmaceutical or veterinary use are claimed.

IT 224787-56-8

RL: AGR (Agricultural use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (use of PDE V inhibitors for improved fecundity in mammals)

RN 224787-56-8 CAPLUS

CN Benzenesulfonamide, 3-(1,4-dihydro-5-methyl-4-oxo-7-propylimidazo[5,1-f][1,2,4]triazin-2-yl)-4-ethoxy-N-[3-(4-phenyl-1-piperazinyl)propyl]-(9CI) (CA INDEX NAME)

L8 ANSWER 22 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:161742 CAPLUS

DN 136:291079

TI New derivatives of the 5-HT1A antagonist WAY 100635

AU Hocke, Carsten

CS Germany

SO Berichte des Forschungszentrums Juelich (2001), Juel-3895, i-viii, 1-133 CODEN: FJBEE5; ISSN: 0366-0885

DT Report

### LA German

The serotonergic system with its different receptor subtypes is one of the AB most important neuronal transmitter systems in the brain. It is involved in the regulation of various physiol. functions and states of mind such as fear, depression and schizophrenia. The radioligand [11C]WAY-100635 ([11C]N-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-N-(2-pyridinyl)cyclohexanecarboxamide) was successfully used in vivo as 5-HT1A antagonist. The aim of the study was to prep. in vivo stable 18F-analogs. New derivatization of WAY 100635 was at first performed by n.c.a. 18F-labeling in 4-position of the cyclohexyl group in a one-step reaction. With the diastereomeric model compds. cis/trans ethyl-4tosylcyclohexanecarboxylate the dependence of various reaction parameters, like temp., solvent and reaction time, on the radiochem. yield (RCY) was tested. The results were transferred to the WAY derivs. The best results of n.c.a. 18F-fluorination were obtained at 100.degree.C using DMSO as The radiochem. yield was about 25% for the cis-diastereomer and 5% for the trans-diastereomer of 4-[18F]fluoro-(N-2-[4-(2-methoxyphenyl)-1piperazinyl]ethyl)-N-(2-pyridinyl)-cyclohexanecarboxamide. Subsequently, the syntheses of stabilized sulfonamides and sulfinamides as new analogs of the 5-HT1A antagonist WAY 100635 were performed. The derivs. were radiolabeled with [18F]fluoride and [123I]iodide for in vivo applications; namely 4-iodo- and 4-fluoro-N-{2-(4-(2-methoxyphenyl)-piperazine-1-yl)ethyl}-N-pyridin-2-yl-benzenesulfonamide as well as the corresponding sulfinamide analogs. With the activating sulfonamide substituent different leaving groups (X = F, Cl, Br, I and NO2) were investigated for no-carrier-added arom. 18F-substitution. Again the effect of various reaction parameters, like temp., solvent and leaving groups, on the max. radiochem. yield was tested in model compds. The results were transfered to the compds. of interest. The 18F-labeled sulfonamides were prepd. by nucleophilic arom. substitution in high RCY of 65% within 15 min using bromine as leaving group at 160.degree.C and DMSO as solvent. The corresponding 18F-labeled sulfinamides were not stable under the labeling conditions tested. The formation of [123I]iodo-analogs of sulfonamides was accomplished by Cu(I)-assisted radioiodo-for-bromo substitution in acetic acid with over 90% RCY. Finally, the 123I-labeled sulfinamide was prepd. via electrophilic destannylation. The RCY of 4-[123I]iodo-N-{2-[4-(2-methoxyphenyl)-piperazin- 1-yl]-ethyl}-N-pyridin-2-ylbenzenesulfinamide was ca. 80% after 2 min in methanol/acetic acid at ambient temp. with chloramine-T as in-situ oxidizing agent. In vitro competition studies with the fluoro- and iodo-sulfonamides and -sulfinamides vs. the highly selective 5-HT1A receptor ligand [3H] 8-OH-DPAT lead to Ki values of 36 to 112 nM. First biodistribution studies in mice of [18F]fluoro-sulfonamide proved the increased in vivo stability.

## IT 407636-07-1DP, radiolabeled

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (5-HT1A receptor antagonist WAY 100635 derivs. for PET and SPET) 407636-07-1 CAPLUS

CN Benzenesulfonamide, 4-iodo-N-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-N-2-pyridinyl- (9CI) (CA INDEX NAME)

RN

$$\begin{array}{c|c} I & & MeO \\ \hline \\ S & N-CH_2-CH_2-N \\ \hline \\ O & \end{array}$$

## RE.CNT 208 THERE ARE 208 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 23 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:142707 CAPLUS

DN 136:200181

TI Substituted and/or fused pyrazoles, particularly piperazinylpropylsubstituted pyrazolopyridines, useful as cathepsin S inhibitors, and their pharmaceutical compositions and use as immunosuppressants

IN Breitenbucher, J. Guy; Cai, Hui; Edwards, James P.; Grice, Cheryl A.;
Gustin, Darin J.; Khatuya, Haripada; Meduna, Steven P.; Pio, Barbara A.;
Tays, Kevin L.; Wei, Jianmei

PA Ortho McNeil Pharmaceutical, Inc., USA

SO PCT Int. Appl., 161 pp. CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 8

FAN.	FAN.CNT 8 PATENT NO.																
	PATENT	NO.			KIN		DATE						NO.		Di	ATE	
ΡI	WO 2002	0143	14												20	0010	810
	WO 2002														_		
		AE,							BA.	BB.	BG.	BR.	BY.	BZ.	CA.	CH.	CN.
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			YU,					•	•	- •	•	•		•		•	·
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		DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
	CA 2419	540			AA		2002	0221	(	CA 2	001-	2419	540		2	0010	810
	AU 2001																
	US 2002																
	EP 1309	591			A2		2003	0514	;	EP 2	001-	9597	31		2	0010	810
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
					LV,												
	JP 2004																
	NZ 5241																
	ZA 2003									ZA 2	003-	2052			2	0030	313
PRAI	US 2000																
	US 2001-928122																
	WO 2001-US25289				W		2001	0810									
os	S MARPAT 136:200181																

GI

## \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Substituted pyrazoles I, methods of manufq. them, compns. contq. them, and methods of using them to treat, for example, autoimmune diseases mediated by cathepsin S, are described [R1 = H, N3, halo, alkoxy, OH, alkyl, alkenyl, cyano, NO2, (un) substituted NH2, acyl, etc.; R2 = H, halo,. alkoxy, alkyl, alkenyl, haloalkyl, cyano, or (un)substituted NH2; or R1R2 = atoms to form (un)substituted (un)satd. (non)arom. 5- to 7-membered carbo- or heterocyclic ring; R3, R4 = H, alkyl; R5, R6 = H, alkyl, alkenyl, alkoxy, alkylthio, halo, or 4- to 7-membered carbo- or heterocyclyl; or R5R6 = atoms to form (un) substituted (un) satd. (non) arom. 5- to 7-membered carbo- or heterocyclic ring; n = 1 or 2; G = 1(un) substituted C3-6 alkanediyl or alkenediyl (substituents = OH, halo, oxo, aminoalkyl, etc.); X, Y, Z = N, (un)substituted CH; Ar = (un) substituted mono- or bicyclic (hetero) aryl; W = SO2, CO, (un) substituted CH2, bond; or WR1 = atoms to form a benzoxazol-2-yl, benzothiazol-2-yl, benzimidazol-2-yl, 1,2-benzisoxazol-3-yl, 1,2-benzisothiazol-3-yl, or 1,1-dioxo-1,2-benzothiazol-3-yl ring; including stereoisomers and pharmaceutically acceptable salts, esters, and amides]. Claimed usages include treatment of lupus, rheumatoid arthritis, and particularly asthma, and inhibition of tissue transplant rejection. Approx. 250 individual compds. I were prepd. and/or claimed, with detailed prepns. given for 24 compds. For instance, 4-(2-chloro-6methanesulfonylaminophenyl)piperazine-1-carboxylic acid tert-Bu ester (prepd. in 4 steps) was deprotected with TFA and coupled with the corresponding epoxide (prepd. in several steps) to give title compd. II, a preferred compd. In an assay for inhibition of recombinant human cathepsin S in vitro, II had an IC50 of 0.06 .mu.M. Compd. III was another of three specifically preferred compds. IT 400804-45-7P, N-[2-[5-Acetyl-3-(4-chlorophenyl)-4,5,6,7tetrahydropyrazolo[4,3-c]pyridin-1-yl]-1-(4-o-tolylpiperazin-1ylmethyl)ethyl]methanesulfonamide RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(drug candidate; prepn. of piperazinylpropyl-substituted pyrazolopyridines and analogs as cathepsin S inhibitors) 400804-45-7 CAPLUS

1H-Pyrazolo[4,3-c]pyridine-1-ethanamine, 5-acetyl-3-(4-chlorophenyl)-4,5,6,7-tetrahydro-.alpha.-[[4-(2-methylphenyl)-1-piperazinyl]methyl]-N-(methylsulfonyl)- (9CI) (CA INDEX NAME)

RN

CN

L8 ANSWER 24 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:43035 CAPLUS

DN 136:102404

TI Synthesis of disubstituted piperazinyl derivatives as CCR-3 receptor antagonists

IN Gong, Leyi; Kertesz, Denis John; Smith, David Bernard; Talamas, Francisco Xavier; Wilhelm, Robert Stephen

PA Syntex (U.S.A.) LLC, USA

SO U.S., 41 pp., Cont.-in-part of U.S. Ser. No. 134,013. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

EMI.	CN1 Z				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6339087	<b>B1</b>	20020115	US 1998-197282	19981120
	US 6323223	B1	20011127	US 1998-134013	19980814
	US 2003153577	<b>A1</b>	20030814	US 2001-942204	20010829
	US 6770650	B2	20040803	·	
	US 6683074	B1	20040127	US 2001-965068	20010926
	US 2004266782	A1	20041230	US 2003-719204	20031121
	US 6984637	B2	20060110		
PRAI	US 1997-56001P	P	19970818		
	US 1998-134013	A2	19980814		
	US 1998-197282	<b>A3</b>	19981120		
	US 2001-965068	<b>A3</b>	20010926		
os	MARPAT 136:102404				
GI					

$$Ar^{F} \stackrel{R^{3}}{\underset{R}{\overset{R^{4}}{\longrightarrow}}} \stackrel{R^{1}}{\underset{R^{2}}{\overset{}}} \stackrel{N-Q-Ar^{1}}{\underset{R^{2}}{\overset{}}}$$

AB Title compds. I [R1-2 = H, alkyl; m = 0-3; F = alkylene, alkenylene, bond; R = H, alkyl or R together with R4 and the atoms to which they are attached form a carbocycle; R3 = H; R4 = alkyl, haloalkyl, cycloalkyl, alkyl-S00-2, alkylene-C(0)-Z, where Z = alkoxy, hydroxyalkyl; E = ureido, thioureido, amido, carboxamido, Ar = substituted aryl optionally

II

I

substituted with one, two or three alk(en)yl, alkoxy, haloalkoxy, halo, aryl, heteroaryl, etc.; Ar1 = (un)substituted aryl, optionally substituted with one, two or three alkyl, heteroalkyl, alkoxy, halo, haloalkyl, haloalkoxy, alkylthio, methylenedioxy, nitro, amino or a combination thereof; Q = alkylene-W, where W = bond, O, S, O2C, carboxamido or C(O)] were prepd. For example, N-Boc-piperazine was alkylated with 3,4-dichlorobenzyl bromide (CHCl3, Et3N, 1 h), deprotected (CHCl3, TFA, 1 h) and coupled to Boc-L-valine (CH2Cl2, EDCI, 2 h) to give the N-protected piperazinylamide intermediate. Deprotection (MeOH, HCl, 70.degree.C, 2.5 h) followed by amide redn. (THF, BH3, reflux, 2 h) and acylation with p-toluoyl chloride (CH2Cl2, Et3N, 1 h) yielded II which was isolated as the dihydrochloride salt. The IC5O value (concn. of test compd. required to reduce 125I-eotaxin binding to the CCR-3 L 1.2 transfected cells by 50%) for selected compds. I was 0.24 - 3.52 .mu.M. Compds. I are useful in treating inflammatory or allergic diseases, e.g., asthma, allergic rhinitis, etc.

IT 220772-02-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug; synthesis of disubstituted piperazinyl derivs. as CCR-3 receptor antagonists)

RN 220772-02-1 CAPLUS

CN Benzenesulfonamide, N-[(1R)-1-[[4-[(3,4-dichlorophenyl)methyl]-1-piperazinyl]methyl]-2-methylpropyl]-4-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

# RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 25 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:31420 CAPLUS

DN 136:85815

TI Preparation of 2,3,4,5-tetrahydro-1H-3-benzazepine derivatives as GPR14 antagonists

IN Tarui, Naoki; Santo, Takashi; Watanabe, Hiroyuki; Aso, Kazuyoshi; Ishihara, Yuji

PA Takeda Chemical Industries, Ltd., Japan

SO PCT Int. Appl., 217 pp. CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_ -----\_\_\_\_\_ -----PΙ A1 20020110 WO 2001-JP5784 20010704 WO 2002002530 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

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CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
             RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
             VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2414976
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     AU 2001071018
                           A5
                                  20020114
                                              AU 2001-71018
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     JP 2002097142
                                              JP 2001-203519
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     EP 1310490
                                              EP 2001-949909
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                                  20030514
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             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     US 2004063699
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                                  20040401
                                              US 2003-332023
                                                                       20030102
PRAI JP 2000-206865
                                  20000704
                           Α
     WO 2001-JP5784
                           W
                                  20010704
     MARPAT 136:85815
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GI
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AB A G-protein-coupled receptor (GPR14) antagonist comprises compds. represented by the formula (I) or a salt thereof (wherein Ar represents optionally substituted aryl; X represents a spacer consisting of 1-4 atoms in the straight chain moiety; n is an integer of 1 to 10; R represents hydrogen or an optionally substituted hydrocarbon group, provided that R may be bonded to the substituent of Ar to form a ring; and Y represents optionally substituted amino or N-contg. heterocyclyl). These compds. are antagonists of orphan receptor GPR14 protein (urotensin II receptor) and are useful as inhibitors of vasoconstriction for the prevention or treatment of hypertension, arteriosclerosis, cardiac hypertrophy, myocardial infarction, or heart failure. Thus, a mixt. of 4-bromo-1-[3-(2,2,2-trifluoroacetyl)-2,3,4,5-tetrahydro-1H-3-benzazepin-7yl]-1-butanone, 1-phenylpiperazine, K2CO3, and DMF was stirred at  $80. {\sf degree.}$  for 2 h, followed by treatment of the product with a mixt. of 1M aq. KOH and methanol and then with 1 N HCl/EtOAc to give 4-(4-phenyl-1-piperazinyl)-1-(2,3,4,5-tetrahydro-1H-3-benzazepin-7-yl)-1butanone trihydrochloride (II). N-(2-{4-[bis(4fluorophenyl) methyl]piperazin-1-yl}ethyl)-2,3,4,5-tetrahydro-1H-3benzazepine-7-carboxamide trihydrochloride in vitro showed IC50 of 1.7 nM for inhibiting the binding of [1251]urotensin to human GPR14. A capsule and a tablet formulation contg. II were prepd.

### IT 387875-92-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of tetrahydrobenzazepine derivs. as GPR14 antagonists and vasoconstriction inhibitors for treatment and prevention of hypertension, arteriosclerosis, cardiac hypertrophy, myocardial infarction, or heart failure)

RN 387875-92-5 CAPLUS

CN 1H-3-Benzazepine-7-sulfonamide, 2,3,4,5-tetrahydro-N-[2-[4-(phenylmethyl)-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 26 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:656233 CAPLUS

DN 136:113011

TI Identification of the dopamine autoreceptor in the guinea-pig retina as D2 receptor using novel subtype-selective antagonists

AU Weber, Bernd; Schlicker, Eberhard; Sokoloff, Pierre; Stark, Holger

CS Institut fur Pharmakologie und Toxikologie, Universitat Bonn, Bonn, 53113, Germany

SO British Journal of Pharmacology (2001), 133(8), 1243-1248 CODEN: BJPCBM; ISSN: 0007-1188

PB Nature Publishing Group

DT Journal

LA English

1 Dopamine release in the retina is subject to modulation via AB autoreceptors, which belong to the D2 receptor family (encompassing the D2, D3 and D4 receptors). The aim of the present study was to det. the receptor subtype (D2 vs. D3) involved in the inhibition of dopamine release in guinea-pig retinal disks, using established (haloperidol, (S)-nafadotride) and novel dopamine receptor antagonists (ST-148, ST-198). 2 HD2L and hD3 receptors were expressed in CHO cells and the pKi values detd. in binding studies with [1251]-iodosulpride were: haloperidol 9.22 vs. 8.54; ST-148 7.85 vs. 6.60; (S)-nafadotride 8.52 vs. 9.51; ST-198 6.14 vs. 7.92. 3 The elec. evoked tritium overflow from retinal disks preincubated with [3H]-noradrenaline (which represents quasi-physiol. dopamine release) was inhibited by the dopamine receptor agonists B-HT 920 (talipexole) and quinpirole (maximally by 82 and 71%; pEC50 5.80 and 5.83). The concn.-response curves of these agonists were shifted to the right by haloperidol (apparent pA2 8.69 and 8.23) and ST-148 (7.52 and 7.66). (S)-Nafadotride 0.01 .mu.M and ST-198 0.32 .mu.M did not affect the concn.-response curve of B-HT 920. 4 The dopamine autoreceptor in the guinea-pig retina can be classified as a D2 receptor. ST-148 and ST-198 show an improved selectivity for D2 and D3 receptors when compared to haloperidol and (S)-nafadotride, resp.

IT 390803-40-4, ST 148

RL: PAC (Pharmacological activity); BIOL (Biological study)
(identification of the dopamine autoreceptor in the guinea-pig retina
as D2 receptor using novel subtype-selective antagonists)

RN 390803-40-4 CAPLUS

CN 1-Naphthalenesulfonamide, 5-(dimethylamino)-N-[4-[4-(2-methoxyphenyl)-1-piperazinyl]butyl]-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 390803-39-1 CMF C27 H36 N4 O3 S

CM 2

CRN 110-16-7 CMF C4 H4 O4

Double bond geometry as shown.

# RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 27 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:651007 CAPLUS

DN 136:47963

Antagonists of the human CCR5 receptor as anti-HIV-1 agents. Part 3: A proposed pharmacophore model for 1-[N-(methyl)-N-(phenylsulfonyl)amino]-2-(phenyl)-4-[4-(substituted)piperidin-1-yl]butanes

AU Finke, P. E.; Meurer, L. C.; Oates, B.; Shah, S. K.; Loebach, J. L.; Mills, S. G.; MacCoss, M.; Castonguay, L.; Malkowitz, L.; Springer, M. S.; Gould, S. L.; DeMartino, J. A.

CS Department of Medicinal Chemistry, Merck Research Laboratories, Rahway, NJ, 07065, USA

SO Bioorganic & Medicinal Chemistry Letters (2001), 11(18), 2469-2473 CODEN: BMCLE8; ISSN: 0960-894X

PB Elsevier Science Ltd.

### 10/768579

DT Journal LA English

OS CASREACT 136:47963

GI

AB Structure-activity relationship studies directed toward the optimization of (2S)-2-(3-chlorophenyl)-1-[N-(methyl)-N-(phenylsulfonyl)amino]-4-[4-(substituted)piperidin-1-yl]butanes as CCR5 antagonists resulted in the synthesis of the spiro-indanone deriv. I (IC50=5 nM). These and previous results are summarized in a proposed pharmacophore model for this class of CCR5 antagonist.

### IT 209160-71-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(phenylsulfonylamino piperidinylbutanes as CCR5 receptor antagonists and potential anti-HIV-1 agents)

RN 209160-71-4 CAPLUS

CN Benzenesulfonamide, N-[(2S)-2-(3-chlorophenyl)-4-(4-phenyl-1-piperazinyl)butyl]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 28 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN AN 2001:432889 CAPLUS

- DN 135:46173
- Preparation of 4-phenyl-2-thiazolylalkyl-1,4-dihydropyridine-3,5-TI dicarboxylates and analogs as bradykinin antagonists
- IN Kawai, Makoto; Murase, Noriaki; Ikeda, Takafumi; Shishido, Yuji; Nukui, Seiji; Okumura, Yoshiyuki; Kawamura, Mitsuhiro
- PA Pfizer Inc., USA
- Eur. Pat. Appl., 60 pp. SO
- CODEN: EPXXDW
- DTPatent
- LА English

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			ΙE,	SI,	LT,	LV,	FI, RO									
	ΑT	2574	79			E	2004	0115	AΤ	2000-	31079	93		20	00012	205
	PT	1106	614			T	2004	0430	PT	2000-	31079	93		20	00012	205
	ES	2211	460			Т3	2004	0716	ES	2000-	31079	93		20	00012	205
	JP	2001	1877	93		A2	2001	0710	JP	2000-	37344	47		20	00012	207
	JP	3651	.885			B2	2005	0525								
	US	2001	0469	93		A1	2001	1129	US	2000-	73199	95		20	00012	207
	US	6444	677			B2	2002	0903								
	CA	2327	925			AA	2001	0610	CA	2000-	23279	925		20	00012	208
	BR	2000	0063	71		Α	2001	0724	BR	2000-	6371			20	00012	211
	JP	2005	1201	07		A2	2005	0512	JP	2004-	36498	30		20	00412	216
PRAI	US	1999	-170	142P		P	1999	1210								
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PRAI OS GI	US JP	1999 2000	-170	142P 447		P	1999	1210	JP	2004-	36498	30		20	00412	216

### \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Title compds. (I) [wherein A = independently halo; Y1 = (CH2)m, CO, or SO; AB Y2 = N or CH; R1 and R2 = independently alkyl; R3 = (un) substituted (CH2)pcycloalkyl, or (bicyclo)alkyl; R4 = (un)substituted thiazolyl, imidazolyl, or oxazolyl; X = S, NH, alkylimino, or O; R5 = H or alkyl; R6 = alkyl or halo; m = 0-2; n = 0-5; p = 0-6; or the pharmaceutically acceptable salts thereof] were prepd. as bradykinin antagonists for the treatment of inflammation, asthma, allergic rhinitis, pain, etc. For example, II was synthesized in a multi-step sequence involving the reaction of Me 3-(2,6-dichlorophenyl)-2-[3-(1,3-thiazol-2-yl)propanoyl]-2propenoate with di-Me 3-amino-2-pentenedioate to give the 2-(2-methoxy-2-oxoethyl)-1,5-dihydropyridine-3,5-dicarboxylate (85%), which was converted to the 3,5-bis(methoxycarbonyl)-1,4-dihydro-2pyridinylacetic acid deriv. (80%) and amidated with 1-(1piperazinylmethyl) cyclohexanecarbonitrile. In recombinant human bradykinin B2 receptor expressing CHO-K1 cells, I inhibited the binding of bradykinin to its receptor sites with IC50 values of 1 nM to 50 nM.

#### IT 344616-86-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of 4-phenyl-2-thiazolylalkyl-1,4-dihydropyridine-3,5dicarboxylates and analogs by reaction of benzylidenes with enamines as bradykinin antagonists)

RN 344616-86-0 CAPLUS

CN 1-Propanesulfonamide, 3-chloro-N-[3-[4-(phenylmethyl)-1-piperazinyl]propyl]- (9CI) (CA INDEX NAME)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 29 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:688218 CAPLUS

DN 133:252456

TI Preparation of N-[2-piperazino(or piperidino)ethyl] benzenesulfonamides and thiophenesulfonamides as 5-HT7 receptor antagonists

IN Lovell, Peter John

PA Smithkline Beecham Plc, UK

SO PCT Int. Appl., 26 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

2744.	PATENT NO.					KIN	D	DATE		(	APPL:	ICAT:	ION I	NO.		D	ATE		
PI	WO	2000	0567:	12		A1	_	2000	0928	,	WO 2	000-1	EP22	 67		2	00003	 314`	
		W:	ΑE,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,	CU,	
			CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	
			IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	
			MA,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	
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			CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG					
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		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
						LV,		RO											
	US	6660	751			В1		2003	1209	1	US 2	001-	9370	43		2	00109	920	
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	WO	2000	-EP2	267		W		2000	0314										
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GI																			

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AB The title compds. [I; Q = Ph, thienyl; R1 = halo, OH, alkyl, etc.; m = 0-3; R2 = alkyl; X = N, C, CH; D = a single bond; CO, O, CH2 subject to the proviso that when X = N then D is not O; P = Ph, naphthyl, 5-6 membered heteroaryl contg. 1-3 heteroatoms selected from O, N and S, etc.; R3 = (un)substituted alkyl; n = 0-3] having 5-HT7 receptor antagonist activity, and therefore useful in the treatment of CNS and other disorders, were prepd. E.g., a multi-step synthesis of benzenesulfonamide II was given. All compds. I tested had a pKi of 6.2-9.0 against 5-HT7 receptor binding.

IT 295790-23-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of N-[2-piperazino(or piperidino)ethyl] benzenesulfonamides and thiophenesulfonamides as 5-HT7 receptor antagonists)

RN 295790-23-7 CAPLUS

CN Benzenesulfonamide, N-[2-[4-(2-chlorophenyl)-1-piperazinyl]ethyl]-N,3-dimethyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} & \text{O} \\ & & \text{I} \\ \hline \\ & \text{N} \end{array}$$

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 30 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN AN 2000:405009 CAPLUS

- DN 133:172107
- TI Antagonist effects on human P2X7 receptor-mediated cellular accumulation of YO-PRO-1
- AU Michel, A. D.; Kaur, R.; Chessell, I. P.; Humphrey, P. P. A.
- CS Glaxo Institute of Applied Pharmacology, Department of Pharmacology, University of Cambridge, Cambridge, CB2 1QJ, UK
- SO British Journal of Pharmacology (2000), 130(3), 513-520 CODEN: BJPCBM; ISSN: 0007-1188
- PB Nature Publishing Group
- DT Journal
- LA English
- 1 The authors have examd. the interaction of P2 antagonists with the human AB P2X7 receptor by studying their effect on 2' and 3'-O-benzoyl-benzoyl-ATP (DbATP) stimulated cellular accumulation of the fluorescent, DNA binding dye, YO-PRO-1 (MW = 375 Da). 2 In suspensions of HEK293 cells expressing human recombinant P2X7 receptors, DbATP produced time and concn.-dependent increases in YO-PRO-1 fluorescence. This response presumably reflects YO-PRO-1 entry through P2X7 receptor channels and binding to nucleic acids. When studies were performed in a NaCl-free, sucrose-contg. buffer, full concn.-effect curves to DbATP could be constructed. 3 The P2 antagonists, pyridoxalphosphate-6-azophenyl-2',4'-disulfonic acid (PPADS) and periodate oxidized ATP (oATP), reduced the potency of DbATP and decreased its max. response. 1-[N,O-bis(1,5-isoquinolinesulfonyl)-Nmethyl-L-tyrosyl]-4-phenylpiperazine (KN62) and its analog, KN04, reduced the potency of DbATP. Schild slopes for KN62 and KN04 were shallow and exhibited a plateau at concns. of compd. greater than 1 .mu.M, indicating that these compds. were not competitive antagonists. 4 Calmidazolium and a monoclonal antibody to human P2X7 receptors attenuated DbATP-stimulated YO-PRO-1 accumulation but they were not competitive antagonists and only produced 2-3 fold decreases in the potency of DbATP. 5 The effects of PPADS and KN62 were partially reversible whereas those of oATP were not. PPADS protected cells against the irreversible antagonist effects of oATP suggesting a common site of action. In contrast KN62 was not effective suggesting that it may bind at a different site to oATP and PPADS. 6 This study has demonstrated that P2X7 receptor function can be quantified by measuring DbATP stimulated YO-PRO-1 accumulation and has provided addnl. information about the interaction of P2 receptor antagonists with the human P2X7 receptor.
- IT 129695-80-3, KN04
  - RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
    - (antagonist effects on human P2X7 receptor-mediated cellular accumulation of fluorescent dye YO-PRO-1 stimulated by O-benzoyl-benzoyl-ATP)
- RN 129695-80-3 CAPLUS
- CN 5-Isoquinolinesulfonic acid, 4-[2-[(5-isoquinolinylsulfonyl)amino]-3-(4-phenyl-1-piperazinyl)propyl]phenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

# RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 31 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:335397 CAPLUS

DN 132:334453

TI Preparation of oxazolidinylmethylthiocarbamic acid derivatives as antibacterial agents

IN Kado, Noriyuki; Tokuyama, Ryukou; Tsubouchi, Masatoshi; Tomita, Yayoi

PA Hokuriku Seiyaku Co., Ltd., Japan

SO PCT Int. Appl., 137 pp. CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

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IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG,
             MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL,
             TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     JP 2000204084
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                                20000725
                                            JP 1999-273230
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                                20010905
     EP 1130016
                          A1
                                            EP 1999-971804
                                                                    19991110
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
         R:
             IE, SI, LT, LV, FI, RO
PRAI JP 1998-320137
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     JP 1999-273230
                          Α
                                 19990927
     WO 1999-JP6260
                          W
                                 19991110
OS
    MARPAT 132:334453
GI
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$$R^{2}$$
 $R^{3}$ 
 $CH_{2}-NH-C-OR^{1}$ 
 $R^{3}$ 

AB The title compds. I [R1 is optionally substituted alkyl or optionally substituted cycloalkyl; and R2, R3 and R4 are each independently hydrogen, halogeno, optionally substituted alkyl, optionally substituted alkoxy, optionally substituted amino, optionally substituted alkanoyl, optionally substituted cycloalkyloxy contg. a heteroatom as the ring-constituting atom, or an optionally substituted satd. heterocyclic group, or alternatively any two of R2, R3 and R4 together with the benzene ring may form an optionally substituted fused hydrocarbon ring] are prepd. The title compd. II in vitro showed IC50 of 0.39 .mu.g/mL against S. aureus, vs. IC50 of 3.13 .mu.g/mL for linezolid.

## IT 268208-72-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of oxazolidinylmethylthiocarbamic acid derivs. as antibacterial agents)

RN 268208-72-6 CAPLUS

[(methylsulfonyl)amino]propyl]-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]-, O-methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L8 ANSWER 32 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1999:456816 CAPLUS
- DN 131:226612
- TI 1-[N,O-Bis-(5-isoquinolinesulphonyl)-N-methyl-L-tyrosyl]-4
   -phenylpiperazine (KN-62), an inhibitor of calcium-dependent calmodulin
   protein kinase II, inhibits both insulin- and hypoxia-stimulated glucose
   transport in skeletal muscle
- AU Brozinick, Joseph T., Jr.; Reynolds, Thomas H.; Dean, David; Cartee, Gregory; Cushman, Samuel W.
- CS Experimental Diabetes, Metabolism and Nutrition Section, DB/NIDDK National Institutes of Health, Bethesda, MD, 20892, USA
- SO Biochemical Journal (1999), 339(3), 533-540 CODEN: BIJOAK; ISSN: 0264-6021
- PB Portland Press Ltd.
- DT Journal
- LA English
- AB Previous studies have indicated a role for calmodulin in hypoxia- and insulin-stimulated glucose transport. However, since calmodulin interacts with multiple protein targets, it is unknown which of these targets is involved in the regulation of glucose transport. In the present study, we have used the calcium-dependent calmodulin protein kinase II (CAMKII) inhibitor 1-[N,O-bis-(5-isoquinolinesulfonyl)-N-methyl-L-tyrosyl]-4- phenylpiperazine (KN-62) to investigate the possible role of this enzyme in the regulation of glucose transport in isolated rat soleus and epitrochlearis muscles. KN-62 did not affect basal 2-deoxyglucose transport, but it did inhibit both insulin- and hypoxia-stimulated glucose

transport activity by 46 and 40% resp. 1-[N,O-Bis-(1,5isoquinolinesulfonyl)-N-methyl-L-tyrosyl]-4-phenylpiperazine (KN-04), a structural analog of KN-62 that does not inhibit CAMKII, had no effect on hypoxia- or insulin-stimulated glucose transport. Accordingly, KN-62 decreased the stimulated cell-surface GLUT4 labeling by a similar extent as the inhibition of glucose transport (insulin, 49% and hypoxia, 54%). Addnl. expts. showed that KN-62 also inhibited insulin- and hypoxia-stimulated transport by 37 and 40% resp. in isolated rat epitrochlearis (a fast-twitch muscle), indicating that the effect of KN-62 was not limited to the slow-twitch fibers of the soleus. The inhibitory effect of KN-62 on hypoxia-stimulated glucose transport appears to be specific to CAMKII, since KN-62 did not inhibit hypoxia-stimulated 45Ca efflux from muscles pre-loaded with 45Ca, or hypoxia-stimulated glycogen breakdown. Addnl., KN-62 affected neither insulin-stimulated phosphoinositide 3-kinase nor Akt activity, suggesting that the effects of KN-62 are not due to non-specific effects of this inhibitor on these regions of the insulin-signalling cascade. The results of the present study suggest that CAMKII might have a distinct role in insulin- and hypoxia-stimulated glucose transport, possibly in the vesicular trafficking of GLUT4.

IT 129695-80-3, KN-04

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(inhibition of insulin- and hypoxia-stimulated glucose transport in skeletal muscle by inhibitor of calcium-dependent calmodulin protein kinase II)

RN 129695-80-3 CAPLUS

CN 5-Isoquinolinesulfonic acid, 4-[2-[(5-isoquinolinylsulfonyl)amino]-3-(4-phenyl-1-piperazinyl)propyl]phenyl ester (9CI) (CA INDEX NAME)

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# RE.CNT 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 33 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1999:325936 CAPLUS

DN 130:352283

TI Preparation of 2-phenylimidazotriazinones as phosphodiesterase inhibitors.

IN Niewohner, Ulrich; Es-Sayed, Mazen; Haning, Helmut; Schenke, Thomas; Schlemmer, Karl-Heinz; Keldenich, Jorg; Bischoff, Erwin; Perzborn, Elisabeth; Dembowsky, Klaus; Serno, Peter; Nowakowski, Marc

PA Bayer Aktiengesellschaft, Germany

SO PCT Int. Appl., 329 pp.

CODEN: PIXXD2

DT Patent

LA German

	PAT	CENT	NO.			KIN	D -	DATE			APPL	ICAT	ION	NO.		D	ATE		
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								MR,											
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		2132				E		2002						9598				9981	
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		1998				A3		1998											
		2000			•	A3		1998											
		1998				W		1998											
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		2000				A1		2000											
		2001				A1		2001											
		2003				A1		2003	0212										
os	MAI	RPAT	130:	3522	83														
GI																			

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$$R^{3}$$
  $R^{4}$   $N$   $N$   $R^{2}$   $R^{5}$ 

AB Title compds. [I; R1 = H, alkyl; R2 = alkyl; R3, R4 = H, alkenyl, alkoxy, (substituted) (O-interrupted) alkyl, amino, adamantyl, cycloalkyl, etc.; NR3R4 = 5-7 membered (benzo-fused) (unsatd.) heterocyclyl, etc.; R5, R6 = H, alkyl, OH, alkoxy], were prepd. as cGMP-metabolizing phosphodiesterases for treating cardiovascular and cerebrovascular diseases and/or diseases of the urogenital system, esp. for treating erectile dysfunction. Thus, 4-ethoxy-3-(5,7-dimethyl-4-oxo-3,4-dihydroimidazo[5,1-f][1,2,4]triazin-2-yl)benzenesulfonyl chloride (prepn. given) in CH2Cl2 was treated with DMAP and N-methylpiperazine at 0.degree. followed by stirring overnight to give 34.5% 2-[2-ethoxy-5-(4-methylpiperazin-1-ylsulfonyl)phenyl]-5,7-dimethyl-3H-imidazo[5,1-f][1,2,4]triazin-4-one. I inhibited phosphodiesterase V with IC50 = 1-10 nM.

I

IT 224787-56-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 2-phenylimidazotriazinones as phosphodiesterase inhibitors)

RN 224787-56-8 CAPLUS

CN Benzenesulfonamide, 3-(1,4-dihydro-5-methyl-4-oxo-7-propylimidazo[5,1-f][1,2,4]triazin-2-yl)-4-ethoxy-N-[3-(4-phenyl-1-piperazinyl)propyl]-(9CI) (CA INDEX NAME)

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 34 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1999:147946 CAPLUS

DN 130:196670

TI Arylcarbamoylalkylpiperazines and -piperidines as CCR-3-receptor antagonists

IN Gong, Leyi; Kertesz, Denis John; Smith, David Bernard; Talamas, Francisco Xavier; Wilhelm, Robert Stephen

PA F. Hoffmann-La Roche A.-G., Switz.

SO Ger. Offen., 60 pp.

	CODEN:	<b>GWXXBX</b>
DT	Patent	
LA	German	
FAN.	CNT 2	
	PATENT	NO.

FAN.	CNT	2																	
	PAT	ENT I	NO.			KINI		DATE			APE	PLIC	ATI	ON 1	NO.		D	ATE	
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	EΡ	90334	49			A2		1999	0324		EΡ	199	8-1	149	71		1:	9980	310
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	ΕP	90334	49			В1		2006	0104										
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			IE,	SI,	LT,	LV,	FI,	RO,	CY										
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	ES	2154	167			В1		2001	1101										
	NO	9803	749			Α		1999	0219		NO	199	8-3	749			1:	9980	317
	GB	2330	580			A1		1999	0428		GB	199	8-1	791	0		1:	9980	317
	AU	9880	800			A1		1999	0225		ΑU	199	8-8	080	0		1:	9980	318
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	FR	27678	826			A1		1999	0305		FR	199	8-1	050	4		1:	9980	318
	CN	1211	572			Α		1999	0324		CN	199	8-1	179	90		1:	9980	318
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	JP	1114	7872			A2		1999	0602		JΡ	199	8-2	319	18		1:	9980	318
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	BR	9803	179			Α		2000	0328		BR	199	8-3	179			1	9980	818
	IT	1304	150			В1		2001	0308		ΙT	199	8-M	I19	02		1	9980	818
	US	20042	2667	82		A1		2004	1230		US	200	3-7	192	04		2	0031	121
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PRAI	US	1997	-560	01P		P		1997	0818										
	US	1998-	-134	013		A3		1998	0814										
	US	2001	-965	068		A3		2001	0926										
os	MAI	RPAT :	130:	1966	70														
GI																			

ArFECR<sup>3</sup>R<sup>4</sup> (CHR)<sub>m</sub>-T 
$$U-QAr^1$$
  $(CH_2)_n$ 

Title compds. I [Ar, Arl = aryl, heteroaryl; E = (un)substituted CONH, SO2NH, NHCONH, NHSO2NH, NHCSNH, NHCO, NHCO2, O2CNH, NHSO2; F = alkylene, alkenylene; R = H, alkyl; R1, R2 = H, alkyl; R3, R4 = H, (un)substituted alkyl, cycloalkyl, heterocyclic, CN; CR3R4 = carbocyclic, heterocyclic; RR3 = atoms required to form a carbocyclic or heterocyclic ring; Q = (un)substituted alkylene, heteroalkylene; one of T an U = N, the other is N or CH; n = 0-2] were prepd. for use as CCR-3 receptor antagonists, useful in treating asthma in particular. Thus, N-[(1S)-[4-(3,4-dichlorobenzyl)piperazin-1-ylmethyl]-2-methylpropyl]-4-methylbenzamide.2HCl was prepd. from 1-(3,4-dichlorobenzyl)piperazine and BOC-L-valine in 4 steps. This compd. had an IC50 for CCR-3 receptor

binding of 0.24 .mu.M.

IT 220772-02-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of arylcarbamoylalkylpiperazines and -piperidines as CCR-3-receptor antagonists)

RN 220772-02-1 CAPLUS

CN Benzenesulfonamide, N-[(1R)-1-[[4-[(3,4-dichlorophenyl)methyl]-1-piperazinyl]methyl]-2-methylpropyl]-4-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L8 ANSWER 35 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1998:486936 CAPLUS

DN 129:211964

TI Isoquinolines as antagonists of the P2X7 nucleotide receptor: high selectivity for the human versus rat receptor homologs

AU Humphreys, Benjamin D.; Virginio, Caterina; Surprenant, Annmarie; Rice, Janet; Dubyak, George R.

CS Department of Physiology and Biophysics, School of Medicine, Case Western Reserve University, Cleveland, OH, 44106, USA

SO Molecular Pharmacology (1998), 54(1), 22-32 CODEN: MOPMA3; ISSN: 0026-895X

PB Williams & Wilkins

DT Journal

LA English

AB 1-[N,O-Bis(5-isoquinolinesulfonyl)-N-methyl-L-tyrosyl]-4-phenylpiperazine (KN-62) and N-[1-[N-methyl-p-(5-isoquinolinesulfonyl)benzyl]-2-(4 phenylpiperazine)ethyl]-5-isoquinolinesulfonamide (KN-04) potently inhibit the human lymphocyte P2Z receptor, an ATP-gated cation channel [Br J Pharmacol 120:1483-1490 (1997)]. Although the mol. identity of the lymphocyte P2Z receptor has not been established, it shares many functional characteristics with the cloned P2X7, nucleotide receptor. have tested whether these isoquinolines inhibit P2X receptor function in human embryonic kidney 293 cells that stably express the human or rat recombinant P2X7 receptors. ATP activation of cation currents and uptake of the org. dye ethidium were potently inhibited by KN-62 and KN-04 in human embryonic kidney cells expressing the human P2X7R but not the rat P2X7R, even though these species homologs share 80% amino acid identity. Introduction of the first 335 amino acids of the human P2X7R sequence conferred KN-62 sensitivity to the rat P2X7R; this suggests that isoquinolines interact with residues in the amino-terminal half (contg. the large extracellular loop) of the human P2X7R. KN-62 and KN-04 also potently inhibited ATP-gated Ca2+ influx and ethidium uptake in several leukocyte cell lines (THP-1, BAC1.2f5, and BW5147) that natively express the human or murine P2X7R mRNA. The ability of isoquinoline sulfonamides

to potently inhibit human and murine P2X7R signaling will be a useful tool for identifying P2Z/P2X7 functional responses in other cell types. The substantial differences in pharmacol. sensitivity between rat and human P2X7R may also indicate structural domains important in channel/pore activation.

IT 129695-80-3, KN-04

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(isoquinolines as antagonists of P2X7 nucleotide receptor and high selectivity for human vs. rat receptor homologs)

RN 129695-80-3 CAPLUS

CN 5-Isoquinolinesulfonic acid, 4-[2-[(5-isoquinolinylsulfonyl)amino]-3-(4-phenyl-1-piperazinyl)propyl]phenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

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RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 36 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN AN 1998:402315 CAPLUS

DN 129:81753

ΤI Preparation of substituted aryl piperazines as modulators of chemokine receptor activity

Mills, Sander G.; Springer, Martin S.; MacCoss, Malcolm IN

PA Merck & Co., Inc., USA; Mills, Sander G.; Springer, Martin S.; MacCoss, Malcolm

PCT Int. Appl., 185 pp. SO

CODEN: PIXXD2

DTPatent

LΑ English

FAN.	CNT	1																
	PAT	CENT 1	NO.			KIN	D :	DATE			APPL	ICAT:	ION 1	.OV		D	ATE	
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			MN,	MX,	NO,	NZ,	PL,	RO,	RU,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	UA,
			US,	UZ,	VN,	ΥU,	AM,	ΑZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM			
		RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT,	BE,	CH,	DE,	DK,	ES,	FI,
			FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	BJ,	CF,	CG,	CI,	CM,
			GΑ,	GN,	ML,	MR,	NE,	SN,	TD,	TG								
	AU	9855	224			A1		1998	0703		AU 1	998-	5522	4		1:	99712	212
PRAI	US	1996	-328	89P		P		1996	1213									
	US	1996	-335	67P		P		1996	1220									
	WO	1997	-US2	2769		W		1997	1212									
os	MAI	RPAT	129:	8175	3													_
GI																		

C1 
$$\sim$$
 Me  $\sim$  M

The title compds. [I; R1 = (un) substituted C1-8 alkyl, C1-8 alkenyl; the nitrogen attached to R1 is optionally quaternized with C1-4 alkyl or phenylC1-4alkyl or is optionally present as N-oxide; Ar = (un)substituted Ph, pyridyl, pyrimidyl, etc.; R8, R9 = H, (un)substituted C1-4 alkyl], useful as modulators of chemokine receptor activity, were prepd. Thus, 5-step synthesis of the title compd. 3(S)-II starting from 3,5-dimethylbenzoic acid and 3(S)-(3,4-dichlorophenyl)-4-methylamino-1pentene was described. In particular, compds. I are useful as modulators of the chemokine receptors CCR-1, CCR-2, CCR-2A, CCR-2B, CCR-3, CCR-4, CCR-5, CXCR-3, and/or CXCR-4. Compds. I can be used for preventing

infection by HIV, treating infection by HIV, delaying of the onset of AIDS, or treating AIDS. Compds. I are effective at 0.1-5~mg/kg/day.

IT 209160-71-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of substituted aryl piperazines as modulators of chemokine receptor activity)

RN 209160-71-4 CAPLUS

CN Benzenesulfonamide, N-[(2S)-2-(3-chlorophenyl)-4-(4-phenyl-1-piperazinyl)butyl]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 37 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1998:126254 CAPLUS

DN 128:204878

TI Preparation of pyrazinobenzothiazine derivatives and analogs for the treatment of inflammation and autoimmune diseases

IN Kaneko, Toshihiko; Clark, Richard; Ohi, Norihito; Ozaki, Fumihiro; Kawahara, Tetsuya; Kamada, Atsushi; Okano, Kazuo; Yokohama, Hiromitsu; Muramoto, Kenzo; Arai, Tohru; Ohkuro, Masayoshi; Takenaka, Osamu; Sonoda, Jiro

PA Eisai Co., Ltd., Japan

SO PCT Int. Appl., 1344 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.						)	DATE		APP	LICAT	ION I	NO.		D	ATE		
							-											
ΡI	WO	9806	720			<b>A1</b>		1998	0219	WO	1997-	JP27	87		1	9970	808	
		W:	AU,	CA,	CN,	HU,	JP,	KR,	MX,	NO, NZ	, RU,	US						
		RW:	AT,	BE,	CH,	DE,	DK,	ES,	FI,	FR, GB	, GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE
	CA	2262	569			AA		1998	0219	CA	1997-	2262	569		1	9970	808	
	AU	9737	849			A1		1998	0306	AU	1997-	3784	9		1	9970	808	
	ZA	9707	103			Α		1999	0208	ZA	1997-	7103			1	9970	808	
	EP	9349	41			A1		1999	0811	EP	1997-	9347	50		1	9970	808	
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, GR	, IT,	LI,	LU,	NL,	SE,	PT,	IE,	FI
	US	6518	423			В1		2003	0211	US	1999-	2308	52		1	9990	405	
	US	2004	0927	37		A1		2004	0513	US	2002-	2473	10		2	0020	920	

PRAI	JP 1996-210344	A	19960809
	WO 1997-JP2787	W	19970808
	US 1999-230852	A3	19990405
os	MARPAT 128:204878	3	
GI			

$$\begin{array}{c|c}
R & R^1 \\
R^2 & R^3 & R^3
\end{array}$$

AB The title compds. I [R1 to R3 are the same or different and each represents hydrogen, optionally substituted lower alkyl, optionally substituted cycloalkyl, etc., provided that when R1 to R3 are all optionally substituted lower alkyl groups, they do not simultaneously represent Me groups; R represents hydrogen, lower alkyl, etc.; E represents N, C, etc.; Z represents O, S, SO, SO2, etc.; and the ring G represents an optionally substituted heteroaryl ring having at least one nitrogen atom] are prepd. I are useful in the treatment and prevention of inflammatory immunol. diseases, autoimmune diseases, rheumatism, collagen disease, asthma, nephritis, ischemic reflow disorders, psoriasis, atopic dermatitis or rejection reactions following organ transplantation. The compd. (syn)-[3-(10H-pyrazino[2,3-b][1,4]benzothiazin-8-ylmethyl)-3azabicyclo[3.3.1]nona-9-yl]acetic acid (II) at 10 mg/kg orally gave 65% inhibition of carrageenin-induced inflammation in rats. II in vitro showed IC50 of 2.3 .mu.M against the expression of ICAM-1.

IT 203663-09-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of pyrazinobenzothiazine derivs. and analogs for treatment of inflammation and autoimmune diseases)

RN 203663-09-6 CAPLUS

CN Methanesulfonamide, N-[[4-(phenylmethyl)-1-piperazinyl]methylene]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & \\ CH = N - S - Me \\ N & O \end{array}$$

RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 38 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1997:713805 CAPLUS

DN 128:18928

TI Antagonism to noradrenaline-induced lethality in rats is related to affinity for the .alpha.1A-adrenoceptor subtype

- AU Testa, Rodolfo; Guarneri, Luciano; Ibba, Marina; Angelico, Patrizia; Poggesi, Elena; Taddei, Carlo; Motta, Gianni; Leonardi, Amedeo
- CS Pharmaceutical RandD Division, RECORDATI S.p.A., Milan, 20148, Italy
- SO Life Sciences (1997), 61(22), 2177-2188 CODEN: LIFSAK; ISSN: 0024-3205
- PB Elsevier
- DT Journal
- LA English
- The potency of several .alpha.1-adrenoceptor antagonists in preventing the AB noradrenaline-induced lethality in conscious rats, their binding affinity for the native .alpha.1A- and .alpha.1B-adrenoceptors, the recombinant animal .alpha.la-, .alpha.lb- and .alpha.ld-adrenoceptor subtypes, as well as their functional affinity for the .alpha.lL-adrenoceptor subtype were evaluated. The potency of the tested compds. as antagonists of noradrenaline-induced lethality was correlated with the affinity for the .alpha.1A- (and .alpha.1a-) adrenoceptor subtype, but not with the affinity for the other subtypes. On the contrary, the hypotensive effects of the compds., assessed in anesthetized rats, were not clearly related with the affinity for any of the .alpha.1-subtypes. These results suggest that the .alpha.1A-subtype plays a detg. role in preventing lethality induced by noradrenaline in the rats, and that this activity is unrelated to the hypotensive effect of the compds., which cannot be clearly correlated with affinity for a particular .alpha.1-adrenoceptor subtype.
- IT 152735-60-9, Rec 15/2757
  RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
  - (antagonism to noradrenaline-induced lethality relation to affinity for .alpha.1A-adrenoceptor subtype)
- RN 152735-60-9 CAPLUS
- CN 4H-1-Benzopyran-8-sulfonamide, N-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-N,3-dimethyl-4-oxo-2-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

## ● HCl

# RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L8 ANSWER 39 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN ·
- AN 1997:686837 CAPLUS
- DN 128:3594
- TI A series of quinoline-2-carboxylic acid derivatives: new potent glycine site NMDA receptor antagonists
- AU Kim, Ran Hee; Choi, Jin Li; Choi, Seung Won; Lee, Kwang Sook; Jung, Young Sik; Park, Woo Kyu; Seong, Churl Min; Park, No Sang
- CS Korea Research Institute of Chemical Technology, Taejeon, 305-606, S. Korea
- SO Bulletin of the Korean Chemical Society (1997), 18(9), 939-945 CODEN: BKCSDE; ISSN: 0253-2964
- PB Korean Chemical Society
- DT Journal
- LA English

GI

## \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Several types of 4-substituted-quinoline-2-carboxylic acid derivs. possessing different substituents at C4-position such as sulfonyl, phosphonyl, carbonyl groups, or a flexible alkyl chain have been synthesized and evaluated for their in vitro antagonistic activity at the glycine site on the N-methyl-D-aspartate (NMDA) receptor. Of them, 5,7-dichloro-4-(tolylsulfonylamino)-quinoline-2-carboxylic acid was found to have the best in vitro binding affinity with IC50 of 0.57 .mu.M. the other hand, in quinolinecarboxylic acids I and II (n = 1, 2) the introduction of flexible alkyl chains on C4 of the quinoline mother nuclei caused a significant decrease of the in vitro binding affinity. In addn., replacement of polar carboxylic acid group on C2 by neutral bioisosteres in quinolinic amides III (R = NHCH2CH2CO2H, Q, Q1, Q2) also seems to be disadvantageous to in vitro activity. In the structure-activity relationship (SAR) study of the 4-substituted quinoline-2-carboxylic acid acid derivs., it was realized that the substitution pattern on C4 significantly influences on the binding affinity for the glycine site of NMDA receptor and the binding affinity might be increased by the introduction of a suitable electron rich substituent at C4 which has the ability of H-bonding donor.

## IT 198696-91-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and NMDA receptor antagonist activity of quinolinecarboxylic acid derivs.)

RN 198696-91-2 CAPLUS

CN 2-Quinolinecarboxylic acid, 5,7-dichloro-4-[[(4-methylphenyl)sulfonyl][2-[4-(phenylmethyl)-1-piperazinyl]ethyl]amino]- (9CI) (CA INDEX NAME)

RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 40 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1997:542438 CAPLUS

DN 127:248014

TI Preparation of piperidinylpropylarenesulfonamide derivatives as 5HT7 receptor antagonists.

IN Forbes, Ian Thomson

PA Smithkline Beecham PLC, UK; Forbes, Ian Thomson

SO PCT Int. Appl., 35 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 1

PAN.	CNT I				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9729097	A1	19970814	WO 1997-EP446	19970127
	W: JP, US				
	RW: AT, BE,	CH, DE, D	K, ES, FI,	FR, GB, GR, IE, IT,	LU, MC, NL, PT, SE
	EP 883613	A1	19981216	EP 1997-902289	19970127
	R: BE, CH,	DE, ES, F	R, GB, IT,	LI, NL	
	JP 2000504677	T2	20000418	JP 1997-528118	19970127
PRAI	GB 1996-2679	Α	19960209		
	GB 1996-13263	Α	19960625		
	WO 1997-EP446	W	19970127		

OS MARPAT 127:248014

AB ArSO2NR1(CR2R3)nNR4R5 [Ar = (substituted) mono- or bicyclic (hetero)aryl; R1 = alkyl; R2, R3 = H, alkyl; R4, R5 = H, alkyl, aryl, aralkyl; NR4R5 = (substituted) 5-8 membered heterocyclyl; n = 2-4], were prepd. Thus, 1-methyl-3-(3-methylpiperidin-3-yl)propylamine and Et3N were treated with 1-naphthalenesulfonyl chloride in CH2Cl2 to give 48% N-[1-methyl-3-(3-methylpiperidin-1-yl)propyl]-1-naphthalenesulfonamide. The latter in DMF was treated with NaH and MeI in DMF to give 68% N-methyl-N-[1-methyl-3-(3-methylpiperidin-1-yl)propyl]-1-naphthalenesulfonamide, isolated as the hydrochloride. Title compds. showed pKi = <5.2-7.8 for displacing [3H]-carboxamidotryptamine from 5HT7 receptor clones.

IT 195199-77-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of piperidinylpropylarenesulfonamide derivs. as 5HT7 receptor antagonists)

RN 195199-77-0 CAPLUS

CN 1-Naphthalenesulfonamide, N-methyl-N-[1-methyl-3-(4-phenyl-1-piperazinyl)propyl]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L8 ANSWER 41 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1997:526102 CAPLUS

DN 127:220471

TI Preparation of nitro compounds for treatment of angina pectoris and for prevention of restenosis after percutaneous transluminal coronary angioplasty

IN Uchida, Yasuyoshi; Koga, Hiroshi; Ko, Naoki

PA Chugai Pharmaceutical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 30 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	Q.,						
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PI	JP 09202764	A2	19970805	JP 1996-43976	19960124		
PRAI	JP 1996-43976		19960124				

OS MARPAT 127:220471

AB R1AR2GR3ONO2 [R1 = (un)substituted Ph, naphthyl, anthryl, other arom. hydrocarbyl, (un)substituted pyridyl, quinolyl, isoquinolyl, carbazolyl, indolyl, other heterocyclyl; A = SO2, O, S, (N-substituted) sulfonamido, amido, thioamido, cyanamido; R2 = C1-10 hydrocarbyl; G = SO2, O, S, (N-substituted) sulfonamido, amido, thioamido, cyanamido, amino, cyclic amino; R3 = (un)substituted C1-18 hydrocarbyl (linked via hetero atom)] or their pharmaceutically acceptable salts are prepd. Mesylation of 3.0 g 5-chloro-N-(6-hydroxyhexyl)-1-naphthalenesulfonamide in CH2Cl2 in the presence of 4-dimethylaminopyridine at room temp. for 2.5 h gave 3.54 g 5-chloro-N-(6-methanesulfonyloxyhexyl)-1-naphthalenesulfonamide, which (1.77 g) was treated with 1.01 mL 2-aminoethanol in THF at 70.degree. for 27 h to afford 920 mg 5-chloro-N-[6-(2-hydroxyethylamino)hexyl]-1naphthalenesulfonamide. The product (200 mg) was treated with urea, fuming HNO3, and Ac2O in CH2Cl2 at room temp. for 4 h to give 60 mg 5-chloro-N-[6-(2-nitroxyethylamino)hexyl]-1-naphthalenesulfonamide nitrate, which at 10-5 M inhibited 52% proliferation of rat vascular smooth muscle cells (A7r5 cells).

IT 195003-63-5p, N-[3-[4-[4-(Hydroxymethyl)benzyl]piperazin-1yl]propyl]benzenesulfonamide
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of antianginal nitro compds.)

RN 195003-63-5 CAPLUS

CN Benzenesulfonamide, N-[3-[4-[[4-(hydroxymethyl)phenyl]methyl]-1-piperazinyl]propyl]- (9CI) (CA INDEX NAME)

L8 ANSWER 42 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1997:503173 CAPLUS

DN 127:126664

TI Pharmaceutical compositions containing isoquinolinesulfonyl derivatives for the treatment of glaucoma and ocular ischemia

- IN Kapin, Michael A.; Desantis, Louis M., Jr.
- PA Alcon Laboratories, Inc., USA; Kapin, Michael A.; Desantis, Louis M., Jr.
- SO PCT Int. Appl., 27 pp. CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 2

FAU.											APPLICATION NO.							DATE			
PI	WO		222 AU,			A1					WO	19	96-1	JS20	197		1	9961	220		
			AT,							FD	GB	2 /	CD	TP	TT	T.II	мс	NT.	יתם	SE	
	CA		271																	51	
											CA.	19.	,	2240	211		1	J J O 1.	220		
	AU 720326				AU 1997-14644							10061220									
													1404	7		_	1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
						EP 1996-945220							19961220								
		IP 868186												13301220							
			AT,								GR	١. :	IT.	LI.	LU.	NL.	SE.	MC.	PT.		
			IE,		,	,	,	,	,	,		.,	,	,	,	,	,	,	,		
	CN	1207	680			Α		1999	0210		CN	19	96-:	1996	73		1	9961	220		
	JP	2001	5097	80		Т2			0724						93			9961			
	JΡ	3719	609			В2		2005	1124												
			15					2005	0315		ΑT	19	96-	9452	20		1	9961	220		
	PT	8681	.86			T		2005	0531		PT	19	96-	9452	20		1	9961	220		
	ES	2238	702			Т3		2005	0901		ES	19	96-	9452	20		1	9961	220		
	TW	5348	14			В		2003	0601		TW	19	97-	8610	1346		1	9970	204		
	US	6271	224			В1		2001	.0807		US	19	99-	7757	5		1	9990	119		
	HK	1015	691			A1		2005	0520						10			9990			
		6403				B1			0611		US	20	01-	9193	01		2	0010	731		
PRAI	US	1995	-935	1P		P		1995	1221												
			-US2					1996	1220												
	US	1999	-775	75		A2		1999	0119												

OS MARPAT 127:126664

AB Isoquinolinesulfonyl compds. (Markush structure given) are used in ophthalmic compns. to treat glaucoma or other ischemic-borne ocular disorders such as retinopathies or optic neuropathies. These compds. vasodilate ocular blood vessels, lower intraocular pressure and prevent or reduce the progression of visual field loss. Topical administration of 150.mu.g fasudil hydrochloride (I) to rabbits eyes decreased the intraocular pressure by 14.6% after 1 h. An eye drop contain I 1.5, benzalkonium chloride 0.01, and phosphate buffered saline q.s. 100%.

IT 192712-45-1

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical compns. contg. isoquinolinesulfonyl derivs. for treatment of glaucoma and ocular ischemia)

RN 192712-45-1 CAPLUS

CN 5-Isoquinolinesulfonamide, N-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-(9CI) (CA INDEX NAME)

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L8 ANSWER 43 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN
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AN 1997:377861 CAPLUS

DN 126:343579

TI Preparation of pyrimidinylpiperazines as lipid peroxidation inhibitors

IN Toldy, Lajos; Zubovics, Zoltan; Szilagyi, Katalin; Vida, Franciska;
Andrasi, Ferenc; Sutka, Klara; Hodula, Eszter; Szekeres, Tibor; Feher,
Gabor; Moravcsik, Imre; Matyus, Peter; Sebestyen, Laszlo; Szabo, Hilda;
Zara, Erzsebet; Horvath, Edit

PA Gyogyszerkutato Intezet, Hung.; Toldy, Rozsa; Toldy, Marta; Toldy, Andras; Zubovics, Zoltan; Szilagyi, Katalin; Vida, Franciska; Andrasi, Ferenc; Sutka, Klara; et al.

SO PCT Int. Appl., 122 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 1

rau.	PATENT NO.						KIND DATE			APPLICATION NO.							DATE		
ΡI	WO	9714	14685		A1 19970424			1	WO 1	996-1		19961014							
		W:	AL,	AM,	AT,	AU,	ΑZ,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	EE,	
			ES,	FI,	GB,	GE,	HU,	IL,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LK,	LR,	LS,	
			LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	
			SE,	SG,	SI,	SK,	ТJ,	TM,	TR,	TT,	UA,	UG,	US,	UZ,	VN,	AM,	AZ,	BY,	
			KG,	ΚZ,	MD,	RU,	ТJ,	TM						•					
		RW:	ΚE,	LS,	MW,	SD,	SZ,	υG,	AT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	
			ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA			
	ни 76265					A2 19970728				HU 1995-3012						19951019			
	AU 9673259					A1		1997	0507	AU 1996-73259						19961014			
PRAI	AI HU 1995-3012						A 19951019												
	WO	1996	-HU5	8		W		1996	1014										
os	MAR	RPAT :	126:	3435	79														
GI																			

$$R-N$$
 $N$ 
 $N$ 
 $R^2$ 
 $R^3$ 

AB Title compds. [I; R = AX(CH2)r(CO)q(CH2)pR1; A = (un)substituted alkylene; R1 = (un)substituted aryl; R2,R3 = NH2 or N-attached heterocyclyl; X = bond, SOO-2, (un)substituted imino; Z = CH2 or CH2CH2; p,q,r = 0 or 1] were prepd. Thus, 1-[2-hydroxy-3-(2-naphthylthio)propyl]piperazine (prepn. given) was N-arylated by 2,6-diamino-4-chloropyrimidine to give I [R = R1SCH2CH(OH)CH2, R1 = 2-naphthyl, R2 = R3 = NH2, Z = CH2]. Data for biol. activity of I were given.

IT 190000-58-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of pyrimidinylpiperazines as lipid peroxidn. inhibitors)

RN 190000-58-9 CAPLUS

CN Methanesulfonamide, N-[3-[4-(2,6-di-1-pyrrolidinyl-4-pyrimidinyl)-1-piperazinyl]-2-hydroxypropyl]-N-2-naphthalenyl- (9CI) (CA INDEX NAME)

L8 ANSWER 44 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1997:305811 CAPLUS

DN 127:16456

TI The isoquinoline derivative KN-62 a potent antagonist of the P2Z-receptor of human lymphocytes

AU Gargett, Caroline E.; Wiley, James S.

CS Department of Haematology, Austin and Repatriation Medical Centre, Heidelberg, VIC 3084, Australia

SO British Journal of Pharmacology (1997), 120(8), 1483-1490 CODEN: BJPCBM; ISSN: 0007-1188

PB Stockton

DT Journal

LA English

AB Extracellular ATP is an agonist for a P2Z receptor on human lymphocytes which mediates opening of a cation-selective ion channel, activation of phospholipase D, and shedding of the adhesion mol., L-selectin, from the

cell surface. The isoquinolinesulfonamides, KN-62, (1-[N, O-bis(5-isoquinolinesulfonyl)-N-methyl-L-tyrosyl]-4-phenylpiperazine), a selective antagonist of Ca2+/calmodulin-dependent protein kinase II (CaMKII), and KN-04, (N-[1-[N-methyl-p-(5 isoquinoline sulfonyl)benzyl]-2-(4 phenylpiperazine)ethyl]-5-isoquinolinesulfonamide) an inactive analog, were used to investigate the possible role of CaMKII in these diverse effects of extracellular ATP. KN-62 potently antagonized ATP-stimulated Ba2+ influx into fura-2 loaded human lymphocytes with an IC50 of 12.7 nM and complete inhibition of the flux at a concn. of 500 nM. Similarly, KN-62 inhibited ATP-stimulated ethidium+ uptake, measured by time resolved flow cytometry, with an IC50 of 13.1 nM and complete inhibition of the flux at 500 nM. KN-04 antagonized ATP-stimulated Ba2+ influx with an IC50 of 17.3 nM. Similarly, KN-04 inhibited ATP-stimulated ethidium+ uptake with an IC50 of 37.2 nM. Both fluxes were completely inhibited at 500 nM KN-04. ATP-stimulated phospholipase D activity, measured in [3H]-oleic acid-labeled lymphocytes by the transphosphatidylation reaction, was antagonized by KN-62 and KN-04, with 50% inhibition at 5.9 and 9.7 nM, resp. Both KN-62 and KN-04 inhibited ATP-stimulated shedding of L-selectin, measured by flow cytometric anal. of cell surface L-selectin, with IC50 values of 31.5 and 78.7 nM, resp. Neither of the isoquinolinesulfonamides (500 nM) inhibited phorbol esteror ionomycin-stimulated phospholipase D activity or phorbol ester-induced shedding of L-selectin. The inhibitory effect of KN-62 or KN-04 on P2Z-mediated responses was slow in onset (5 min) and only partially reversed by washing the cells. Both KN-62 and KN-04 (at 500 nM) had no effect on UTP-stimulated Ca2+ transients in fura-2 loaded human neutrophils, a response which is mediated by the P2Y2 receptor. KN-62 and KN-04 are potent antagonists of the P2Z receptor and at nanomolar concns. inhibit all known responses mediated by the P2Z receptor of human lymphocytes. In contrast, KN-62 and KN-04 had no effect on responses mediated by the P2Y2 receptor of neutrophils. Moreover, since KN-62 and KN-04 are almost equipotent, the P2Z-mediated responses do not involve CaMKII, but indicate that the isoquinolinesulfonamides are potent and direct inhibitors of the P2Z-receptor.

IT 129695-80-3, KN-04

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(isoquinoline deriv. KN-62 and its inactive analog as antagonists of P2Z-receptor of human lymphocytes)

RN 129695-80-3 CAPLUS

CN 5-Isoquinolinesulfonic acid, 4-[2-[(5-isoquinolinylsulfonyl)amino]-3-(4-phenyl-1-piperazinyl)propyl]phenyl ester (9CI) (CA INDEX NAME)

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# RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 45 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1997:169157 CAPLUS

DN 126:225315

TI Bicyclic heterocyclic derivatives having .alpha.l-adrenergic and 5HT1A serotonergic activities

IN Leonardi, Amedeo; Motta, Gianni; Riva, Carlo; Testa, Rodolfo

PA Recordati S.A., Chemical and Pharmaceutical Company, Switz.

SO U.S., 84 pp., Cont.-in-part of U.S. 5,474,994. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 5605896	Α	19970225	US 1994-299188	19940831
	US 5403842	Α	19950404	US 1992-888775	19920526
	AU 9336296	A1	19930913	AU 1993-36296	19930223

	RO 112111	В3	19970530	RO 1994-1404	19930223
	PL 175556	B1	19990129	PL 1993-304889	19930223
	RU 2128656	C1	19990410	RU 1994-43324	19930223
	SK 280143	В6	19990910	SK 1994-1007	19930223
	ZA 9301278	A	19931118	ZA 1993-1278	19930224
	LT 3038	В	19940925	LT 1993-354	19930224
	CN 1079738	Α	19931222	CN 1993-105852	19930526
	CN 1040434	В	19981028		
	US 5474994	Α	19951212	US 1993-67861	19930526
	FI 9403876	Α	19940823	FI 1994-3876	19940823
	NO 9403140	Α	19940825	NO 1994-3140	19940825
PRAI	IT 1992-MI408	Α	19920225		
	US 1992~888775	A2	19920526		
	US 1993-67861	A2	19930526		
	EP 1993-301264	Α	19930222		
	WO 1993-EP420	Α	19930223		
os	MARPAT 126:225315				
GI					

AB Bicyclic heterocyclic derivs., such as I [X = N, O, S; W = C(O), C(S), CH(OH), bond; R2 = H, optionally substituted alkyl, alkenyl, alkylnyl, carbocycle, heterocycle; R3 = alkyl, hydroxyalkyl, Ph, OH, alkoxy, alkoxyalkyl; R6 = H, halogen, NO2, NH2, AcNH, mono-, dialkylamino, CN, OH, alkoxy, alkyl; Y = CO, CO2, CONH, CH(OH), CH:CH, CH:CHCO2, CH:CHCONH, CH2NH, CH2NHCO, CH2NHSO2, CH2O, CH2S, NH, NHCO, NHCONH, NHSO2, O, S, SO2NH, CONHO, CSNH, NHCO2, COS, CONH(CH2)m, m = 1-6; Z = N, A = (un)substituted Ph, pyrimidinyl, 1,4-benzodioxan-8-yl, benzopyran-8-yl, benzofuran-7-yl, dihydrobenzopyran-8-yl; Z = CH2N; Z = CH, A = one or two

CN

Ph, 4-FC6H4CO, 2-oxo-1-benzimidazolinyl, (CH2)nOA, n = 0-2], and their pharmaceutically acceptable salts useful as .alpha.1-adrenergic and 5HTlA serotonergic agents for the treatment of hypertension, urethral and lower urinary tract contractions, and other disorders are described. Thus, benzopyran II was prepd. by heating 1-(2-methoxyphenyl)piperazine with benzopyran III at 180.degree. for 5 h. II had IC50 = 29 nM for .alpha.1-adrenergic receptor binding, IC50 = 9 nM for 5HTlA receptor binding, ED25 = 45 .mu.g/kg i.v. hypotensive effect and ED25 = 1.4 .mu.g/kg in Na-induced urethral contractility assays.

IT 152735-59-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of bicyclic heterocyclic derivs. having .alpha.1-adrenergic and 5HT1A serotonergic activities)

RN 152735-59-6 CAPLUS

4H-1-Benzopyran-8-sulfonamide, N-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-3-methyl-4-oxo-2-phenyl-, monohydrochloride (9CI) (CAINDEX NAME)

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HC1

PRAI US 1995-373651

MARPAT 125:195206

OS

GI

ANSWER 46 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN  $r_8$ 1996:563465 CAPLUS AN 125:195206 DN Preparation of N-(2-hydroxy-3-aminopropyl)sulfonamides TI Sprengeler, Paul; Smith, Amos B., III; Hirschmann, Ralph F.; Yokoyama, IN Trustees of the University of Pennsylvania, USA PA PCT Int. Appl., 21 pp. SO CODEN: PIXXD2 DT Patent LΑ English FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_ 19960725 WO 1996-US576 19960116 PΙ WO 9622097 **A1** W: CA, JP RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE US 5612339 19970318 US 1995-373651 19950117 А

19950117

Α

- The title compds. [I and II, R1 = H, OH, C1-10 alkyl, C3-20 aryl; R2, R4, R6 = H, C1-10 alkyl, C3-20 aryl, etc.; R3 = H, C1-10 alkyl, C4-25 alkaryl; R5 = H, C1-10 alkyl, C3-20 aryl; X, Y = C1-6 alkylene; Q = N, CH2], useful as antibacterial agents (no data), were claimed. Synthesis of compd. I [R1 = 4-N2NC6H4; R2 = iBu; R3 = tBu; Q = N; X = (CH2)2; Y = CH2; R6 = 3-pyridylmethyl] is described.
- RN 178942-68-2 CAPLUS
  CN 2-Piperazinecarboxamide, 1-[3-[[(4-aminophenyl)sulfonyl](2-methylpropyl)amino]-2-hydroxypropyl]-N-(1,1-dimethylethyl)-4-(3-pyridinylmethyl)- (9CI) (CA INDEX NAME)

- L8 ANSWER 47 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1996:407459 CAPLUS
- DN 125:96333
- TI Assay and purity control of new serotonergic anxiolytics by HPTLC and scanning densitometry
- AU Farina, Anna; Doldo, Antonio; Cotichini, Viviana; Rajevic, Maya
- CS Lab. Chimica Farmaco, Ist. Sup. Sanita, Rome, 00161, Italy
- SO Journal of Planar Chromatography--Modern TLC (1996), 9(3), 185-188 CODEN: JPCTE5; ISSN: 0933-4173
- PB Research Institute for Medicinal Plants
- DT Journal
- LA English
- AB A high-performance TLC (HPTLC) method with densitometric UV detection was used for the detn. and purity control of serotonergic anxiolytics. With silica gel as adsorbent and 3 different mobile phases, all the potential impurities were well sepd. from the main components and from each other. Detection limits of a few nanograms were obtained at a signal-to-noise ratio 3:1. The relative std. deviation values for the main components and related impurities were between 2.2 and 3.4%. The results obtained were compared with those obtained by a previously established HPLC method.
- IT 164030-31-3
  - RL: ANT (Analyte); ANST (Analytical study)
    - (purity control of serotonergic anxiolytics by HPTLC and densitometry)
- RN 164030-31-3 CAPLUS
- CN Benzoic acid, 2-[[[4-[4-(2-pyrimidinyl)-1-piperazinyl]butyl]amino]sulfonyl]- (9CI) (CA INDEX NAME)

L8 ANSWER 48 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1996:366115 CAPLUS

DN 125:115158

TI Peptidomimetic N-(2-hydroxy-3-aminopropyl) sulfonamides as proteolytic enzyme inhibitors

PA University of Pennsylvania, USA

SO U.S., 9 pp. CODEN: USXXAM

CODEN: USX

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PI	US 5519060	Α	19960521	US 1995-373564	19950117		
	WO 9622087	A1	19960725	WO 1996-US501	19960116		
	W: CA, JP						

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE PRAI US 1995-373564 A 19950117

OS MARPAT 125:115158

GI

AB A method is claimed for modulating the activity of an enzyme (no data), comprising contacting said enzyme with at least one compd. having

structure I or II: wherein: R1 is H, OH, alkyl having 1 to about 10 carbon atoms, or aryl having 3 to about 20 carbon atoms; R2 is H, alkyl having 1 to about 10 carbon atoms, aryl having 3 to about 20 carbon atoms, alkaryl having 4 to about 25 carbon atoms, or an amino acid side chain; R3 is H, alkyl having one to about 10 carbon atoms, or alkaryl having 4 to about 25 carbon atoms; R4 is H, alkyl having 1 to about 10 carbon atoms, aryl having 3 to about 20 carbon atoms, alkaryl having 4 to about 25 carbon atoms, or an amino acid side chain; R5 is H, alkyl having one to about 10 carbon atoms, or aryl having 3 to about 20 carbon atoms; R6 is H, alkyl having one to about 10 carbon atoms, aryl having 3 to about 20 carbon atoms, or alkaryl having 4 to about 25 carbon atoms; X and Y are, independently, alkylene having 1 to about 6 carbon atoms, provided that the sum of X and Y is less than or equal to 9; and Q is N or CH2. Synthetic schemes for the prepn. of representative II structures are provided.

#### IT 178942-68-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(peptidomimetic N-(2-hydroxy-3-aminopropyl) sulfonamides as proteolytic enzyme inhibitors)

RN 178942-68-2 CAPLUS

CN 2-Piperazinecarboxamide, 1-[3-[[(4-aminophenyl)sulfonyl](2-methylpropyl)amino]-2-hydroxypropyl]-N-(1,1-dimethylethyl)-4-(3-pyridinylmethyl)- (9CI) (CA INDEX NAME)

- L8 ANSWER 49 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1996:234316 CAPLUS
- DN 124:338800
- TI The Ca2+/calmodulin-dependent protein kinase II inhibitors KN62 and KN93, and their inactive analogs KN04 and KN92, inhibit nicotinic activation of tyrosine hydroxylase in bovine chromaffin cells
- AU Marley, Philip D.; Thomson, Kerrie A.
- CS Dep. Pharmacol., Univ. Melbourne, Parkville, 3052, Australia
- SO Biochemical and Biophysical Research Communications (1996), 221(1), 15-18 CODEN: BBRCA9; ISSN: 0006-291X
- PB Academic
- DT Journal
- LA English
- AB The possible role of Ca++/calmodulin-dependent protein kinase II (CAM-K-II) in the nicotinic activation of tyrosine hydroxylase in intact cultured bovine adrenal chromaffin cells was investigated. Over the concn. range 3-30 .mu.M, KN62, a specific CAM-K-II inhibitor, inhibited basal tyrosine hydroxylase activity and the activity stimulated by nicotine or K+ depolarization. KN04, a structural analog of KN62 which does not inhibit CAM-K-II, produced an identical concn.-dependent

CN

inhibition of basal and nicotine-stimulated tyrosine hydroxylase activity. Another CAM-K-II inhibitor, KN93, also inhibited nicotine and K+ stimulation of tyrosine hydroxylase activity; however, an inactive analog of KN93, KN92, mimicked these effect. The results suggest that the inhibition of nicotine- and K+-stimulated tyrosine hydroxylase activity by KN62 and KN93 is not due to their ability to inhibit CAM-K-II.

IT 129695-80-3, KN04

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(Ca2+/calmodulin-dependent protein kinase II inhibitors KN62 and KN93, and their inactive analogs KN04 and KN92, inhibit nicotinic activation of tyrosine hydroxylase in bovine chromaffin cells)

RN 129695-80-3 CAPLUS

5-Isoquinolinesulfonic acid, 4-[2-[(5-isoquinolinylsulfonyl)amino]-3-(4-phenyl-1-piperazinyl)propyl]phenyl ester (9CI) (CA INDEX NAME)

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L8 ANSWER 50 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1996:157139 CAPLUS

DN 124:256714

- TI KN-62, a calcium/calmodulin-dependent protein kinase II inhibitor, inhibits high potassium-stimulated prolactin secretion and intracellular calcium increases in anterior pituitary cells
- AU Cui, Z. J.; Hidaka, H.; Dannies, P. S.
- CS Department of Pharmacology, Yale University School of Medicine, 333 Cedar Street, New Haven, CT, 06510, USA
- SO Biochimica et Biophysica Acta, Molecular Cell Research (1996), 1310(3), 343-7
  CODEN: BBAMCO; ISSN: 0167-4889
- PB Elsevier B.V.
- DT Journal
- LA English
- AB In isolated rat anterior pituitary cells, KN-62 (10 .mu.M), an isoquinoline sulfonamide inhibitor of calcium/calmodulin-dependent protein kinase II, inhibited high KCl(50 mM)-stimulated prolactin secretion almost completely, with an IC50 of 95 nM. KN-62 inhibited TRH-induced prolactin secretion less effectively. KN-04, a compd. that is over 100-fold less active in inhibiting purified calcium/calmodulin-dependent protein kinase II, also inhibited high KCl-stimulated prolactin secretion with an IC50 of 500 nM. KN-62 and KN-04 (10 .mu.M) both inhibited high KCl-stimulated increases in intracellular Ca2+ concns. The authors conclude that KN-62 and KN-04 inhibit activation of voltage-dependent calcium channels in anterior pituitary cells either directly or indirectly.
- IT 129695-80-3, KN-04
  - RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
    - (KN-62, a calcium/calmodulin-dependent protein kinase II inhibitor, inhibits high potassium-stimulated prolactin secretion and intracellular calcium increases in anterior pituitary cells)
- RN 129695-80-3 CAPLUS
- CN 5-Isoquinolinesulfonic acid, 4-[2-[(5-isoquinolinylsulfonyl)amino]-3-(4-phenyl-1-piperazinyl)propyl]phenyl ester (9CI) (CA INDEX NAME)

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ANSWER 51 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

1996:52662 CAPLUS AN 124:176127 DN Preparation of sulfamoylindanyl- and sulfamoyl-1,2,3,4-ΤI tetrahydronaphthylpyridazinone derivatives as drugs IN Ishida, Akihiko; Pponma, Koichi; Kono, Haruyuki; Tamura, Koji; Sasaki, Yasuhiko PA

Tanabe Seiyaku Co, Japan

SO Jpn. Kokai Tokkyo Koho, 35 pp. CODEN: JKXXAF

Patent DT

LΑ Japanese

L8

FAN.C	CNT 1				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07233072	A2	19950905	JP 1994-322942	19941226
PRAI	JP 1994-322942	Α	19941226		
	JP 1993-333966		19931228		
os	MARPAT 124:176127				

GI

AB The title compds. [I; R1 = (un)substituted C1-10 alkyl, C3-6 cycloalkyl, lower alkenyl, (un) substituted heterocyclyl contg. N, O, or S heteroatom, camphor-10-yl; R3 = H, (un) substituted lower alkyl, lower alkenyl; or R1 and R3 are linked to each other at the termini to form a lower alkylene; R2 = H, (un) substituted lower alkyl, aryl, lower alkenyl; A-B = ethylene or vinylene optionally substituted by 1-2 groups selected from lower alkyl or Ph; n = 1,2; D = H, halo], which are useful for the treatment and prevention of nephritis, in particular glomerulonephritis, IgA nephritis, nephrotic syndrome, and/or lupus nephritis and as blood platelet aggregation inhibitors and/or protective agents against endotoxin shock, are prepd. Thus, 1.15 g 2-amino-5-[3-oxo-3(H)-4,5-dihydropyridazin-6yl]indan was dissolved in EtOAc and THF, followed by successively adding an aq. soln. of 1.4 g K2CO3 in 20 mL and 0.57 g MeSO2Cl, and the resulting mixt. was stirred for 2 h to give 1.08 g 2-methanesulfonylamino-5-[3-oxo-3(H)-4,5-dihydropyridazin-6-yl]indan (II). Mice was administered with II at 100 mg/kg p.o. and after 30 min treated with a soln. of Escherichia coli-derived endotoxin (lipopolysaccharides) in physiol. saline at 100 mg/10 mL/kg i.p. The survival ratio of the treated mice was 100 %.

I

IT 172680-06-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of sulfamoylindanyl- and sulfamoyltetrahydronaphthylpyridazinon e derivs. as drugs)

RN 172680-06-7 CAPLUS

1-Butanesulfonamide, N-[2,3-dihydro-5-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-1H-inden-2-yl]-N-[3-(4-phenyl-1-piperazinyl)propyl]- (9CI) (CA INDEX NAME)

$$O = \begin{bmatrix} O & & & & \\ S - Bu - n & & & \\ N & & & & \\ N - (CH_2)_3 - N & & & \\ \end{bmatrix}$$

L8 ANSWER 52 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN AN 1996:35000 CAPLUS

CN

## 10/768579

DN 124:232248

ΤI Benzopyran derivatives having affinity for .alpha.1-adrenergic and 5HT1A-serotoninergic receptors

Leonardi, Amedeo; Motta, Gianni; Riva, Carlo; Testa, Rodolfo Recordati S.A., Chemical and Pharmaceutical Company, Switz. IN

PA

U.S., 37 pp. Cont.-in-part of U.S. 5,403,842. SO CODEN: USXXAM

DΤ Patent

LΑ English

FAN.	CNT 3					
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
ΡI		Α	19951212			
	US 5403842	A	19950404	US 1992-888775	19920526	
	EP 558245	A1	19930901	EP 1993-301264	19930222	
	R: AT, BE, CH,	DE, DK	, ES, FR,	GB, GR, IE, IT, LI, LU,	MC, NL, PT, SE	
	AU 9336296	A1	19930913	AU 1993-36296	19930223	
	RO 112111	в3	19970530	RO 1994-1404	19930223	
	PL 175556	B1	19990129	PL 1993-304889	19930223	
	SK 280143	В6	19990910	SK 1994-1007	19930223	
	CN 1079738	Α	19931222	CN 1993-105852	19930526	
	CN 1040434	В	19981028			
	FI 9403876	Α	19940823	FI 1994-3876	19940823	
	NO 9403140	A	19940825	NO 1994-3140	19940825	
	US 5605896	Α	19970225	US 1994-299188	19940831	
PRAI	US 1992-888775	A2	19920526			
	EP 1993-301264	Α	19930222			
	IT 1992-MI408	A	19920225			
	WO 1993-EP420	Α	19930223			
	US 1993-67861	A2	19930526			
os	MARPAT 124:232248		•			
GI						

$$R^{6}$$
 $X$ 
 $R^{2}$ 
 $Y-Z-B$ 
 $I$ 
 $N-A$ 
 $(CH_{2})_{n}$ 
 $II$ 

This invention provides bicyclic heterocyclic derivs. I wherein the dotted AB line represents a single or double bond; X represents a nitrogen, oxygen or sulfur atom, or an amino or alkylamino group, a sulfinyl or sulfonyl group; W represents a carbonyl, thiocarbonyl, hydroxymethylene, or a methylene group or a bond; or when X is nitrogen and W is a methine, the fused rings represent a quinoline; R2 represents, e.g, a hydrogen atom or an alkyl, alkenyl, alkynyl, carbocyclic or heterocyclic group, each of which groups may optionally be substituted; or R2 itself represents a trifluoromethyl or an aroyl group; R3 represents a hydrogen atom or an alkyl, hydroxyalkyl, alkyl-O-R4 Ph, hydroxy, or O-R4, wherein R4 represents an alkyl group optionally substituted with an aryl group; R6 represents a hydrogen or halogen atom or a nitro, amino, acylamino, alkylsulfonylamino, alkylamino, dialkylamino, cyano, hydroxy, alkoxy or alkyl group; R7 represents a hydrogen atom or an alkoxy group; Y = e.g., CO, COO, CONH; Z represents a linear or branched chain alkylene group having from 1 to 6 carbon atoms and optionally having one hydroxy substituent; B = e.g., II, n = 1 or 2, A = substituted Ph, 2-pyrimidinyl;and their pharmaceutically acceptable salts useful for the treatment of hypertension, urethral and lower urinary tract contractions, and other disorders. The compds. are also useful for binding .alpha.1-adrenergic and 5HT1A serotonergic receptors, in vitro or in vivo. Thus, e.g., esterification of 8-carboxy-3-methyl-4-oxo-2-phenyl-4H-1-benzopyran with 1-(3-chloropropyl)-4-(2-methoxyphenyl)piperazine followed by HCl treatment afforded 8-{3-[4-(2-methoxyphenyl)-1-piperazinyl]propoxycarbonyl}-3-methyl-4-oxo-2-phenyl-4H-1-benzopyran dihydrochloride (III.2HCl) which exhibited IC50's of 20 and 19 nM, resp., for .alpha.1 and 5-HT1A receptor binding. Data were also presented for the effect of I on K+ stimulation of rat bladder strips, and on urethral contractions and blood pressure in dogs. IT 152735-59-6P RL: BAC (Biological activity or effector, except adverse); BSU (Biological

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(benzopyran derivs. having affinity for .alpha.1-adrenergic and 5HT1A-serotoninergic receptors)

RN 152735-59-6 CAPLUS

CN 4H-1-Benzopyran-8-sulfonamide, N-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-3-methyl-4-oxo-2-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

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0

HCl

L8 ANSWER 53 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:902630 CAPLUS

DN 123:313770

TI Preparation of piperidino and piperazino 5-HT2 receptor antagonists and blood platelet aggregation inhibitors

IN Aoki, Tsuyoshi; Takahashi, Atsuo; Sato, Hiroyasu; Shimanuki, Eiji; Gengyou, Kaoru; Nishimata, Toyoki; Ishigami, Sachiko; Yamada, Shin-ichi; Yamaguchi, Takahiro; et al.

PA Toa Eiyo Ltd., Japan

SO Eur. Pat. Appl., 123 pp. CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 2

PATENT NO. KIND DATE APPLICATION NO. DATE

PI EP 661266 A1 19950705 EP 1994-120698 19941227

R: BE, CH, DE, ES, FR, GB, IT, LI, LU, NL

JP 07242629 A2 19950919 JP 1994-336707 19941226 PRAI JP 1993-346805 A 19931227

OS MARPAT 123:313770

GΙ

$$R^{1}$$
 $R^{2}$ 
 $R^{2}$ 
 $R^{2}$ 
 $R^{2}$ 
 $R^{3}$ 
 $Q-B$ 
 $R^{4}$ 
 $R^{5}$ 
 $R^{5}$ 

The title compds. [I; A = CH2, CO, sulfonyl; B, T = direct bond, CH2, CO, CH(OH), C(:NH); D = CH, N, N.fwdarw.O; P = N, N.fwdarw.O; Q = CH, N; R1, R2 = H, OH, (un)branched alkyl, alkenyl, (un)substituted aralkyl, acyl, (un)substituted NH2, etc.; R3 = H, OH, (un)branched alkyl or alkoxy; R4, R5 = H, OH, halogen, (un)branched alkyl, alkenyl, alkoxy, alkylthio, (un)substituted NH2, SH, etc.; n = 1-6], useful as 5-HT2 receptor antagonists and blood platelet aggregation inhibitors, are prepd. Thus, 4-acetylamino-N-[2-[4-(4-fluorobenzoyl)piperidino]ethyl]-N-(3-methoxyphenyl)benzamide fumarate, m.p. 215-222.degree. (decompn.), prepd. by the reaction of the free base with fumaric acid, demonstrated a IC50 for platelet aggregation in rabbit-derived, platelet-rich plasma of .ltoreq.9.9 x 10-8 M, vs. 1.0-9.9 x 10-7 M for ketanserin.

IT 169945-97-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of piperidino and piperazino 5-HT2 receptor antagonists and blood platelet aggregation inhibitors)

RN 169945-97-5 CAPLUS

CN Benzenesulfonamide, N-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-4-methoxy- (9CI) (CA INDEX NAME)

L8 ANSWER 54 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:807948 CAPLUS

DN 123:228215

TI Piperazine derivatives as .alpha.1A-adrenergic receptor antagonists

IN Leonardi, Amedeo; Motta, Gianni; Riva, Carlo; Testa, Rodolfo

PA Recordati Industria Chimica e Farmaceutica S.p.A, Italy; Recordati S.A., Chemical and Pharmaceutical Co.

SO PCT Int. Appl., 60 pp. CODEN: PIXXD2

DT Patent

LA English

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ΡI	WO 9	5040	49						0209							1	9940	722	
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			NL,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SI,	SK,	TJ,	TT,	UA,	US,	UZ,	VN
		RW:	KE,	MW,	SD,	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	
			NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	ML,	MR,	NE,	SN,	TD,	TG
	CA 2	21684	43			AA		1995	0209	(	CA 1	994-	2168	443		1	9940	722	
									0228		AU 1	994-	7532	3		1	9940	722	
									0717										
	EP 7	71128	8			<b>A1</b>		1996	0515		EP 1	994-	9253	82		1	9940	722	
									FR,										SE
									1002										
									0128										
									0307										
•									0329	1	NO 1	996-	371			1	9960	129	
PRAI																			
		L994-																	
os	CASE	REACT	123	3:22	8215	; MAI	RPAT	123	:2282	215									
GI																			

$$Y-W-N$$
 $N-A$ 
 $\parallel$ 
 $C-O-(CH_2)_3-N$ 
 $N-A$ 
 $\parallel$ 
 $C-O-(CH_2)_3-N$ 
 $N-A$ 
 $N-$ 

AΒ Title compds. I are disclosed [in which Y = bond, SOn, NR2, NR2CO, PO(OEt)NH, NHCONH, CO, SO2NR2, (CH2)nCOO, (CH2)nCONR2; W = C2-6 alkylene; A = substituted Ph, or a benzofuran or benzodioxan group; R and R1 have many values, but R is preferably bulky; with provisos]. I and their prodrugs, enantiomers, diastereoisomers, N-oxides, and pharmaceutically acceptable salts block .alpha.1A-adrenergic receptors, and are useful for preventing contractions of the prostate, urethra and lower urinary tract, without affecting blood pressure. Because of their generally low toxicity, less selective I at higher dosages may also be useful as antihypertensives. For example, O-alkylation of 2-benzyloxybenzoic acid with 1-(3-chloropropyl)-4-(2-methoxyphenyl)piperazine in DMF in the presence of K2CO3 at 80.degree. gave title compd. II, isolated as its di-HCl salt (III). Compared to prazosin (IV), III had slightly lower .alpha.1A-adrenoceptor affinity and comparable oral toxicity in mice, but in expts. on urethral contractility and blood pressure in dogs, III showed higher selectivity for urethral activity, with a blood pressure/urethral ED ratio of 6.7, vs. 1.8 for IV and 2.6 for urapidil.

IT 168053-03-0P

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of piperazine derivs. as .alpha.1A-adrenergic receptor antagonists)

RN 168053-03-0 CAPLUS

CN Benzenesulfonamide, N-[3-[4-(2-methoxyphenyl)-1-piperazinyl]propyl]- (9CI) (CA INDEX NAME)

L8 ANSWER 55 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:537305 CAPLUS

DN 123:18065

TI Analysis of non-benzodiazepinic anxiolytic agents by capillary zone electrophoresis

AU Quaglia, M. G.; Farina, A.; Boxxu, E.; Dell'aquila, C.

CS Dip. Farm., Univ. "La Sapienza", Rome, 00185, Italy

SO Journal of Pharmaceutical and Biomedical Analysis (1995), 13(4/5), 505-9 CODEN: JPBADA; ISSN: 0731-7085

PB Elsevier

DT Journal

LA English

AB A simple capillary electrophoretic method was developed for the anal. of a new generation of and their related substances: zalospirone, gepirone, ipsapirone and busipirone. All compds. run in a Tris/phosphate buffer at pH 3 as cations and the exptl. conditions allowed good resoln. of four drugs and their principal impurities. The anal. were made using two different kinds of capillary. The suitability of CZE and HPLC methods for the anal. of these non-benzodiazepinic anxiolytic agents and their impurities was compared.

IT 164030-31-3

RL: ANT (Analyte); ANST (Analytical study)
(serotonergic anxiolytics detn. by capillary zone electrophoresis)

RN 164030-31-3 CAPLUS

CN Benzoic acid, 2-[[[4-[4-(2-pyrimidinyl)-1-piperazinyl]butyl]amino]sulfonyl]- (9CI) (CA INDEX NAME)

L8 ANSWER 56 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:63852 CAPLUS

DN 122:71338

TI Synthesis and evaluation of N-substituted 1-(5-fluoro-2-pyrimidinyl)piperazine derivatives as potential anti-ischemic agents

AU Yevich, Joseph P.; Dextraze, Pierre; Taylor, Duncan P.; Moon, Sandra L.

CS Bristol-Myers Squibb Pharm. Res. Inst., Wallingford, CT, 06492-7660, USA

SO Bioorganic & Medicinal Chemistry Letters (1994), 16(4), 1941-6 CODEN: BMCLE8; ISSN: 0960-894X

DT Journal

LA English

AB A no. of N-substituted 1-(5-fluoro-2-pyrimidinyl)piperazine derivs. were prepd. and evaluated for binding to sigma and serotonin 5-HT1A and 5-HT2 receptor subtypes as well as for their protection against nitrogen anoxia-induced lethality in rats. Although various compds. exhibited good binding affinity and/or anti-anoxic effects, there was no obvious correlation between their receptor binding and in vivo effects. Structure-activity relations are examd.

IT 133982-23-7

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(synthesis and evaluation of N-substituted

(fluoropyrimidinyl)piperazine derivs. as potential anti-ischemic agents in relation to receptor binding)

RN 133982-23-7 CAPLUS

CN Benzenesulfonamide, 4-fluoro-N-[1-(4-fluorophenyl)-4-[4-(5-fluoro-2-pyrimidinyl)-1-piperazinyl]butyl]- (9CI) (CA INDEX NAME)

L8 ANSWER 57 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1994:557540 CAPLUS

DN 121:157540

TI 5-Isoquinolinesulfonamide derivatives

IN Kabashima, Shigeru; Nagumo, Hiromitsu

PA Asahi Chemical Ind, Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	·				
I	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-					
	JP 06100540 JP 1992-254605	A2	19940412 19920924	JP 1992-254605	19920924

### \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title derivs. I [R1 = NHCH2CH2R2, NHCH2CHMeNH(CH2)5Me, Q, Q1; R2 = Q2-10] and their salts with acids, useful as inhibitors of protein kinase, are prepd. Thus, stirring a mixt. of 5-isoquinolinesulfonyl chloride, (2-aminoethyl)morpholine, and Et3N in CH2Cl2 at room temp. gave 71% 5-(2-morpholinoethylaminosulfonyl)isoquinoline.

IT 157383-17-0P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, for protein kinase inhibitor)

RN 157383-17-0 CAPLUS

CN 5-Isoquinolinesulfonamide, N-[2-[4-(4-methoxyphenyl)-1-piperazinyl]ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

HCl

- ANSWER 58 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN AN 1994:435618 CAPLUS DN 121:35618 TI Pyridazinone derivatives and processes for preparing them Ishida, Akihoko; Homma, Koichi; Kono, Harumichi; Tamura, Koji; Sasaki, IN Yasuhiko
- PA Tanabe Seiyaku Co., Ltd., Japan SO

Eur. Pat. Appl., 47 pp. CODEN: EPXXDW

DTPatent LΑ English

FAN.CNT 1

L8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
				~~	
PI	EP 579059	A1	19940119	EP 1993-110611	19930702

	ΕP	5790	59			B1	19	9990	512										
		R:	AT,	BE,	CH,	DE,	DK, I	ES,	FR,	GB,	GR	, IE	, IT,	LI,	LU,	MC,	NL,	PT,	SE
	JP	0601	6663			A2	19	9940	125	,	JP .	1992	-2153	54		1:	9920'	702	
	CA	2099	743			AA	19	9940	103	(	CA	1993	-2099	743		1	9930	629	
	JP	0607	3020			A2	19	9940	315		JP	1993	-1593	38		1	9930	629	
	ΑT	1799	72			E	19	990	515	i	AT	1993	-1106	11		1	9930	702	
	US	5739	132			Α	19	980	414	1	US	1996	-7674	44		1:	99612	216	
PRAI	JP	1992	-215	354		Α	19	9920	702										
	JP	1992	-215	355		Α	19	9920	702										
	US	1993	-834	89		В1	19	9930	630										
os	MAI	RPAT	121:	3561	8														
GI																			

AB Pyridazinones I wherein (1) R1 is a substituted or unsubstituted C1-10 alkyl, a C3-6 cycloalkyl, a lower alkenyl, a heterocyclic group having N, O or S atom or camphor-10-yl; R3 is hydrogen, a substituted or unsubstituted lower alkyl or a lower alkenyl; or R1 and R3 are bonded at terminal ends thereof to form a lower alkylene; and Z is a group represented by II where n is 1 or 2; and D is hydrogen or a halogen; or (2) R1 is a substituted or unsubstituted C1-10 alkyl, a substituted or unsubstituted Ph, a C3-6 cycloalkyl, a lower alkenyl, a heterocyclic group having N, O or S atom or camphor-10-yl; R3 is hydrogen, a substituted or unsubstituted lower alkyl or a lower alkenyl; or R1 and R3 are bonded at terminal ends thereof to form a lower alkylene; and Z is a group represented by III and R2 is hydrogen, a substituted or unsubstituted lower alkyl, an aryl or a lower alkenyl; and -A-B- is an ethylene or vinylene each of which may be substituted by 1 or 2 groups selected from the group consisting of a lower alkyl and Ph group, or a pharmaceutically acceptable salt thereof were prepd. and are useful for protecting from endotoxin shock and curing nephritis. Thus, mice treated with 2-methylsulfonylamino-5-[4,5-dihydropyridazin-3(2H)-on-6-yl]indan (prepd. by methanesulfonylation of 2-amino-5-[4,5-dihydropyridazin-3(2H)-on-6yl]indan) had 100% survival rate vs. a control when infected with an endotoxin (lipopolysaccharide) derived from Escherichia coli.

IT 172680-06-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of, for endotoxin shock protection and nephritis treatment)

RN 172680-06-7 CAPLUS

CN 1-Butanesulfonamide, N-[2,3-dihydro-5-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-1H-inden-2-yl]-N-[3-(4-phenyl-1-piperazinyl)propyl]- (9CI) (CA INDEX NAME)

$$O = S - Bu - n$$

$$N - (CH2)3 - N$$
Ph

L8 ANSWER 59 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1994:106770 CAPLUS

DN 120:106770

TI Heterobicyclic compounds (flavoxate analogs) as antagonists of .alpha.l-adrenergic and 5-HT1A receptors

IN Leonardi, Amedeo; Motta, Gianni; Riva, Carlo; Testa, Rodolfo

PA Recordati S.A. Chemical and Pharmaceutical Co., Switz.; Recordati Industria Chimica e Farmaceutica S.p.a.

SO Eur. Pat. Appl., 109 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 3

PATENT NO.		ĸ	KIND DATE		APPITCATTON NO	DATE
PI	EP 558245		A1	19930901	EP 1993-301264	19930222
					GB, GR, IE, IT, LI,	
	US 5403842	•	A .	19950404	US 1992-888775	19920526
	CA 2090156		AA	19930826	US 1992-888775 CA 1993-2090156	19930223
	WO 9317007		A1	19930902	WO 1993-EP420	19930223
	W: AU, BG	, CA, C	Z, FI,	HU, KR,	LK, NO, NZ, PL, RO,	RU, SK, UA
	RW: AT, BE	, CH, D	E, DK,	ES, FR,	GB, GR, IE, IT, LU,	MC, NL, PT, SE
	AU 9336296		A1	19930913	AU 1993-36296	19930223
	HU 72448		A2	19960429	AU 1993-36296 HU 1994-2443 RO 1994-1404 PL 1993-304889 RU 1994-43324	19930223
	RO 112111		В3	19970530	RO 1994-1404	19930223
	PL 175556		B1	19990129	PL 1993-304889	19930223
	RU 2128656		C1	19990410	RU 1994-43324	19930223
	SK 280143		B6	19990910	SK 1994-1007	19930223
	IL 104824		A1	19991222	IL 1993-104824	19930223
	AU 9333773 AU 660067		Al		AU 1993-33773	19930224
	AU 660067		B2	19950608		1000001
	ZA 9301278 LT 3038 LV 10099 JP 06009606 TW 382628		A	19931118		19930224
	LT 3038		В	19940925	LT 1993-354	19930224
	LV 10099		В	19950220	LV 1993-136	19930224
	JP 06009606		AZ	19940118	mrz 1000 0010000	19930225
	TW 382628		В	20000221	TW 1993-82103988	19930520
	CN 10/9/38		A	19931222	CN 1993~105852	19930526
	CN 1040434		В	19981028	TW 1993-82103988 CN 1993-105852 US 1993-67861 FI 1994-3876 NO 1994-3140	10030536
	US 54/4994		Α .	19951212	US 1993-67861	19930526
	F1 9403876		A	19940823	FI 1994-3876	19940823
DDAT	IT 1992-MI408		A A	19940825	NO 1994-3140	19940825
PRAI	US 1992-8180775					
	EP 1993-301264		A.	19920526 19930222		
	WO 1993-301264		A A	19930222		
os	MARPAT 120:106		A	13330223		
US	MARPAT 120:100	,,,				

GI

AΒ Title compds. I [dotted line = optional double bond; X = O, S, imino, alkylimino, S(0), S(0)2; W = bond, CO, C(S), CH2, CH(OH); R2 = H, (un) substituted alkyl, alkenyl, alkynyl, carbocyclyl, heterocyclyl, aroyl; R3 = H, alkyl, hydroxyalkyl, alkoxyalkyl, aralkoxyalkyl, Ph, OH, alkoxy, aralkoxy; R6 = H, halo, NO2, (un)substituted NH2, cyano, OH, alkoxy, alkyl; R7 = H, alkoxy; Y = 49 bivalent functional groups such as CO, CO2, CONH, CH:CH, CH2, CH2NH, CH2O, O, S, SO2NH, etc.; Z = C1-6 alkylene with 1 optional OH substituent; B = various complex amine-contg. groups including substituted piperazines, piperidines, phenoxyalkylamines, etc.] and their prodrugs, N-oxides, and salts are claimed, with approx. 130 synthetic examples and 100 intermediate prepns. For example, 3-methyl-4-oxo-2phenyl-4H-1-benzopyran-8-carbonyl chloride was amidated with H2N(CH2)3OH, and the resulting N-(3-hydroxypropyl) amide was converted to the N-(3-chloropropyl) amide by SOCl2. Condensation of this with 1-(2-methoxyphenyl)piperazine at 180.degree. gave title compd. II. I inhibited .alpha.1 receptor binding ([3H]-prazosin), 5-HT1A receptor binding ([3H]-8-OH-DPAT), and K+-induced contraction of isolated rat bladder, with different I showing different degrees and combinations of activity. For example, II had IC50 values of 29 nM, 9 nM, and 2.9-3.0 .mu.M in the 3 tests, whereas flavoxate was inactive in the receptor tests and only had IC50 of 13 .mu.M in the bladder test. Some I and esp. II showed high selectivity for urethral spasmolytic activity over antihypertensive activity in dogs.

IT 152735-59-6

RN

RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. as .alpha.1-adrenergic and/or 5-HT1A receptor antagonist)
152735-59-6 CAPLUS

CN 4H-1-Benzopyran-8-sulfonamide, N-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-3-methyl-4-oxo-2-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

### PAGE 1-A

PAGE 2-A

0

HCl

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ANSWER 60 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN
L8
    1993:641393 CAPLUS
AN
    119:241393
DN
ΤI
    Isoquinoline sulfonamide derivatives for anti-ulcer agents
IN
    Hidaka, Hiroyoshi; Ishikawa, Tomohiko
PA
    Japan
SO
    U.S., 8 pp.
    CODEN: USXXAM
DT
    Patent
LΑ
    English
FAN.CNT 1
    PATENT NO.
                      KIND
                            DATE
                                      APPLICATION NO.
                                                           DATE
    _____
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                            -----
                                      -----
    US 5244895
                      Α
                            19930914
                                      US 1992-883344
                                                           19920515
PΙ
PRAI JP 1991-8580
                     Α
                            19910515
OS MARPAT 119:241393
GI
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$$CH_2$$
  $OR^4$   $C(R^2)R^3N$   $A$ 

AB The anti-ulcer agents of the invention are I [R1 = H, (substituted) C1-2 alkyl; R2, R3 = H or together form oxo; R4 = H, Me, isoquinoline sulfonyl; n = 2, 3; A = NR5 CHR5 (R5 = (substituted) Ph, (substituted) benzyloxycarbonyl] or a physiol. allowable acid addn. salt thereof. Twelve specific I are claimed; and prepn. of 3 I is described. Thus, N-[N,O-bis(5-isoquinoline sulfonyl)-N-methyl-tyrosyl]-4-phenylpiperazine (II) (prepn. given) and 15 other I were tested in an anti-gastric juice secretion test and an anti-aspirin ulcer test. Tablet and injection formulations of II phosphate are included.

IT 130962-59-3

RL: BIOL (Biological study)

(ulcer inhibitor)

RN 130962-59-3 CAPLUS

CN 5-Isoquinolinesulfonic acid, 4-[2-[(5-isoquinolinylsulfonyl)methylamino]-3-(4-phenyl-1-piperazinyl)propyl]phenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

L8 ANSWER 61 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1993:480377 CAPLUS

DN 119:80377

TI Analysis of new serotonergic anxiolytics by liquid chromatography

AU Farina, A.; Doldo, A.; Quaglia, M. G.

CS Lab. Chim. Farm., Ist. Super. Sanita, Rome, 00161, Italy

SO Journal of Pharmaceutical and Biomedical Analysis (1992), 10(10-12), 889-93

CODEN: JPBADA; ISSN: 0731-7085 DT Journal

LA English

AB A simple isocratic procedure was developed for the anal. of new serotonergic anxiolytics and related compds. in bulk, pharmaceuticals, and in biol. samples. The system may be applied for the assay of other serotonergic anxiolytics of related structure such as buspirone. The HPLC assay utilized a reversed-phase C18 column, a mobile phase consisting of a mixt. (55:45) of (A) buffer potassium dihydrogen phosphate (0.05M) contg. sodium lauryl sulfate (0.005M) and (B) MeCN. A fluorescence detection was used with .lambda.ex 237 nm; .lambda.em 374 nm. The accuracy, precision and sensitivity of the proposed method were established. Std. curves were linear with respect to concn. in the range 0.05-7.5 .mu.g mL-1. The method also allowed the sepn. and identification of related compds. at concns. <0.01%.

IT 149095-55-6

RL: PROC (Process)

(sepn. of, as impurity from serotonergic anxiolytic by HPLC)

RN 149095-55-6 CAPLUS

CN 1,3-Cyclohexadiene-1-carboxylic acid, 2-[[[4-[4-(2-pyrimidinyl)-1-piperazinyl]butyl]amino]sulfonyl]- (9CI) (CA INDEX NAME)

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L8
    ANSWER 62 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN
    1993:124410 CAPLUS
AN
DN
    118:124410
ΤI
    Substituted 5-isoquinolinesulfonamides as antiulcer agent
IN
    Hidaka, Hiroyoshi; Ishikawa, Tomohiko
PA
    Eur. Pat. Appl., 15 pp.
SO
    CODEN: EPXXDW
DT
    Patent
    English
LΑ
FAN.CNT 1
    PATENT NO.
                                                               DATE
                       KIND
                              DATE
                                         APPLICATION NO.
                        A1
B1
PΙ
    EP 513691
                              19921119
                                          EP 1992-107816
                                                                19920508
    EP 513691
                              19960731
        R: DE, FR, GB
    JP 06009402
                        A2
                              19940118
                                         JP 1991-138580
                                                                19910515
PRAI JP 1991-138580
                        Α
                              19910515
os
    MARPAT 118:124410
GI
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AB Title compds. I [R1 = H, (substituted) C1-2 alkyl; R2, R3 = H, R2R3 = O; R4 = H, Me, isoquinolinylsulfonyl; n = 2, 3; A = R5N, R5CH wherein R5 = (substituted) Ph, PhCH2O2C] or a salt thereof, some of which were prepd., are antiulcer agents. N-(tert-Butoxycarbonyl)tyrosine Me esters in THF and DMF was added to NaH followed by MeOCH2CH2OCH2Cl to give N-(tert-butoxycarbonyl)-O-(2-methoxyethoxymethyl)tyrosinol which in CCl4 was reacted with Ph3P followed by 4-(3,4-dichlorobenzyloxy)piperidine to give N-[2-amino-3-(p-hydroxyphenyl)propyl]-4-(3,4-dichlorobenzyloxy)piperidine which in THF was treated 5-isoquinolinesulfonyl chloride HCl to give I (R1-R4 = H, n = 2, A = 3,4-Cl2C6H3CH2OCH) (II). In test for antiaspirin ulcer test, II at 100 mg/kg showed 65% inhibition. A tablet and aseptic injection formulation comprising an analog of II.phosphate is given.

Ι

IT 130962-61-7

RL: RCT (Reactant); RACT (Reactant or reagent)
 (antiulcer agent)

RN 130962-61-7 CAPLUS

CN 5-Isoquinolinesulfonamide, N-[1-[(4-hydroxyphenyl)methyl]-2-(4-phenyl-1-piperazinyl)ethyl]- (9CI) (CA INDEX NAME)

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L8
    ANSWER 63 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN
AN
     1993:80951 CAPLUS
DN
    118:80951
     Preparation of sulfonamide derivatives containing heterocyclyl groups
ΤI
     Kajihara, Akiro; Asano, Toshio
IN
     Asahi Kasei Kogyo K. K., Japan
PA
SO
     PCT Int. Appl., 42 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     Japanese
FAN.CNT 1
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
     PATENT NO.
                         ----
                                19920903
                                                                   19920213
PΙ
     WO 9214712
                         A1
                                           WO 1992-JP146
        W: CA, NO, US
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE
     JP 05001037
                                19930108
                                            JP 1991-261394
                                                                   19910913
                         A2
     CA 2089128
                         AA
                                            CA 1992-2080128
                                                                   19920213
                                19920814
     EP 525203
                                            EP 1992-904985
                                                                   19920213
                         A1
                                19930203
        R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE
                                           US 1992-927493
                                                                   19920929
     US 5326870
                               19940705
                         Α
     NO 9203808
                                19921211
                                            NO 1992-3808
                                                                   19920930
                         Α
     NO 178066
                          В
                                19951009
                         С
     NO 178066
                                19960117
PRAI JP 1991-19761
                         A
                                19910213
     WO 1992-JP146
                                19920213
     MARPAT 118:80951
GI
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AB The title compds. [I; A = H, alkyl; E = alkyl, alkoxyalkyl, aryloxyalkyl, etc.; G = alkylene; Q1, Q2 = (CH2)2, (CH2)3; X = quinoline, isoquinoline, benzothiazole, 4-oxoquinazoline residue], useful as antiasthmatics, are prepd. 8-Chloro-5-quinolinesulfonic acid was refluxed with SOCl2 in DMF and the resultant sulfonyl chloride was treated with piperazine deriv. II and Et3N in CH2Cl2 at 20.degree. to give 72% sulfonamide III, which showed 82% inhibition of histamine-induced vasoconstriction at 0.1 mg/kg i.v. in guinea pigs.

#### 10/768579

IT 145708-53-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as antiasthmatic agent)

RN 145708-53-8 CAPLUS

CN 5-Quinolinesulfonamide, 8-chloro-N-[2-[4-[3-(3-pyridinyl)propyl]-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

L8 ANSWER 64 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1993:80890 CAPLUS

DN 118:80890

TI Synthesis and biological evaluation of some piperazine derivatives of isothiazolo[5,4-b]pyridin-3-one and its 1,1-dioxide

AU Malinka, Wieslaw

CS Dep. Drug Chem., Sch. Med., Wroclaw, 50137, Pol.

SO Acta Poloniae Pharmaceutica (1991), 48(1-2), 19-23 CODEN: APPHAX; ISSN: 0001-6837

DT Journal

LA English

GI

Me 
$$CO_2Et$$
 $SO_2NH(CH_2)_3N$ 
 $N$ 
 $V$ 

Twenty-one piperazinylalkyl-substituted isothiazolopyridine derivs. I were AB prepd. for screening as CNS active agents. Thus, I (Y = CH2, X = S, R = Me, 2-, 3-, and 4-ClC6H4, 2-pyridyl, and 2-pyrimidinyl) were obtained in 55-85% yields in the Mannich reaction of II (X = S, R1 = H, III) with CH2O and the appropriately 4-R-substituted piperazine. I (Y = CH2CHOHCH2, X = S, R as above plus Ph) were prepd. in 60-83% yields from III via II (X = S, R1 = 2.3-epoxypropyl) and subsequent oxirane ring opening with the appropriately 4-R-substituted piperazine. I (Y = (CH2)2, X = SO2, R = Me,Ph, 2-pyridyl, and 2-pyrimidinyl) were prepd. in 54-74% yields from II (X = SO2, R1 = H, IV) via II [X = SO2, R1 = (CH2)2OH], the tosyl deriv. of which was treated with the 4-R-substituted piperazine, whereas the analogously R-substituted I [Y = (CH2)3, X = SO2] were prepd. in 50-70% yields directly from IV in the reaction with 4-R-1-(3chloropropyl)piperazine. When 4-(2-pyridyl)- and 4-(2pyrimidinyl)piperazine were used in the latter reaction, some V (Z = CHand N, resp.) were formed.

IT 145787-23-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

RN 145787-23-1 CAPLUS

CN 3-Pyridinecarboxylic acid, 4,6-dimethyl-2-[[[3-[4-(2-pyridinyl)-1-piperazinyl]propyl]amino]sulfonyl]-, ethyl ester (9CI) (CA INDEX NAME)

L8 ANSWER 65 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1993:16135 CAPLUS

DN 118:16135

TI Inhibition of insulin secretion by KN-62, a specific inhibitor of the multifunctional calcium/calmodulin-dependent protein kinase II

AU Wenham, Robert M.; Landt, Michael; Walters, Steven M.; Hidaka, Hiroyoshi; Easom, Richard A.

CS Dep. Biochem. Mol. Biol., Texas Coll. Osteop. Med., Fort Worth, TX, 76107, USA

SO Biochemical and Biophysical Research Communications (1992), 189(1), 128-33 CODEN: BBRCA9; ISSN: 0006-291X

DT Journal

LA English

The effects of KN-62, a specific inhibitor of Ca2+/calmodulin-dependent protein kinase II (CamPKII), on insulin secretion and protein phosphorylation were studied in rat pancreatic islets and RINm5F cells. KN-62 was found to dose-dependently inhibit autophosphorylation of CamPKII in subcellular prepns. of RINm5F cells (K0.5 = 3.1 mM), but had no effect on protein kinase C or myosin light chain kinase activity. KN-62, but not the inactive analog KN-04, dose-dependently inhibited glucose-induced insulin release (K0.5 = 1.5 .mu.M) in a manner similar to the inhibition of CaMPKII autophosphorylation. KN-62 (10 .mu.M) inhibited carbachol (in the presence of (mM glucose) and potassium-stimulated insulin secretion from islets by 53% and 59%, resp. These results support a role of CamPKII in glucose-sensitive insulin secretion.

IT **129695-80-3**, KN-04

RL: BIOL (Biological study)

(protein kinase response to, in pancreatic .beta. cells)

RN 129695-80-3 CAPLUS

CN 5-Isoquinolinesulfonic acid, 4-[2-[(5-isoquinolinylsulfonyl)amino]-3-(4-phenyl-1-piperazinyl)propyl]phenyl ester (9CI) (CA INDEX NAME)

PAGE 2-A

- L8 ANSWER 66 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1992:20955 CAPLUS
- DN 116:20955
- TI Preparation of isoquinoline-5-sulfonamides and analogs as blood vessel relaxants
- IN Hidaka, Hiroyoshi; Ishikawa, Tomohiko; Hagiwara, Masatoshi; Inoue, Tsutomu; Naitoh, Kenji; Sakuma, Osamu; Yuasa, Masayuki; Morita, Tadashi; Toshioka, Tadashi; et al.
- PA Tobishi Pharmaceutical Co., Ltd., Japan
- SO Ger. Offen., 86 pp.
  - CODEN: GWXXBX
- DT Patent
- LA German
- FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	DE 3942114	A1	19900628	DE 1989-3942114	19891220
	DE 3942114	C2	19970904		•
	CA 2005741	AA	19900626	CA 1989-2005741	19891215
	CA 2005741	С	19980602		

	JP 02256666	A2	19901017	JP	1989-325959	19891218
	JP 2886225	B2	19990426			
	SE 8904261	Α	19900627	SE	1989-4261	19891219
	SE 503081	C2	19960318			
	US 5081246	Α	19920114	US	1989-453623	19891220
	DE 3943678	C2	19991125	DE	1989-3943678	19891220
	GB 2228933	A1	19900912	GB	1989-28895	19891221
	GB 2228933	B2	19930331			
	CH 680441	Α	19920831	CH	1989-4647	19891221
	DK 8906662	A	19900627	DK	1989-6662	19891222
	DK 175678	B1	20050117			
	FR 2640973	A1	19900629	FR	1989-17091	19891222
	FR 2640973	B1	19920327			
	NL 8903143	Α	19900716	NL	1989-3143	19891222
	NL 193726	В	20000403			
	NL 193726	С	20000804			
	ES 2029759	A6	19920901	ES	1989-4335	19891222
	AT 8902935	Α	19940215	AT	1989-2935	19891222
	CN 1044098	Α	19900725	CN	1989-109843	19891226
	CN 1025618	В	19940810			
	JP 03007262	A2	19910114	JP	1990-11719	19900123
	JP 3048590	B2	20000605			
	JP 03047170	A2	19910228	JP	1990-52686	19900306
	JP 3078295	B2	20000821			
	US 5216150	Α	19930601	US	1991-758808	19910912
	GB 2248235	A1	19920401	GB	1991-22595	19911024
	GB 2248235	в2	19930331			
	US 5245034	Α	19930914	បន	1992-856178	19920323
	CN 1074214	Α	19930714	CN	1992-115101	19921230
	CN 1028638	В	19950531			
	NL 9900004	Α	19990901	NL	1999-4	19990517
	NL 194549	В	20020301			
	NL 194549	С	20020702			
PRAI	JP 1988-325910	A	19881226			
	JP 1989-76419	Α	19890330			
	JP 1989-87868	Α	19890410			
	DE 1989-3942114	A3	19891220			•
	US 1989-453623	A3	19891220			
	GB 1989-28895	A3	19891221			
	NL 1989-3143	A3	19891222			
	CN 1989-109843	Α	19891226			
	US 1991-758808	A3	19910912			
os	MARPAT 116:20955					
GI						

$$Q^{3} = -N - (CH_2)_{T}$$

AB The title compds. [I; R1 = H, CHO, (halophenyl)propargyl, (un)substituted alkyl, aralkyl, Ph; R2 = WNR3CHR4XmQ1, CH(CR12R13R)CH2Q2, W = alkylene, (un)substituted phenylenediyl, or a combination of these; R3 = R1; R1R3 =

alkylene; R4 = H, alkyl; X = CH:CH, C.tplbond.C; Q1, Q2 = (un)substituted Ph, naphthyl, heterocyclyl; R12, R13 = H; R12R13 = O; R = Q3; A = CO, (un)substituted CH2, NH, etc.; R1R3 = alkylene; Y = N, CH, CMe; m, n = 1-3] were prepd. Thus, I (R1 = H, Y = N) (II; R2 = CH2CH2NH2) was stirred 1 h with 4-ClC6H4CH:CHCHO in MeOH after which NaBH4 was added and stirring continued 30 min to give II (R2 = CH2CH2NR5CH2CH:CHC6H4Cl-4) (III; R5 = H) which was methylated to give III (R5 = Me). The latter had EC50 of 0.19 .mu.M for relaxation of rabbit aorta strips in vitro.

IT 129695-80-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as blood vessel relaxant)

RN 129695-80-3 CAPLUS

CN 5-Isoquinolinesulfonic acid, 4-[2-[(5-isoquinolinylsulfonyl)amino]-3-(4-phenyl-1-piperazinyl)propyl]phenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

L8 ANSWER 67 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1991:632247 CAPLUS

DN 115:232247

TI Preparation of imidazole sulfonamides as antithrombotic agents

## 10/768579

IN Graeve, Rolf; Okyayuz-Baklouti, Ismahan; Seiffge, Dirk PA Hoechst A.-G., Germany SO Ger. Offen., 39 pp. CODEN: GWXXBX DT Patent LA German FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE PΙ DE 4004061 19910814 DE 1990-4004061 19900210 **A**1 EP 442348 A2 19910821 EP 1991-101497 19910205 EP 442348 **A3** 19920304 EP 442348 B1 19960717 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE 19960815 AT 1991-101497 AT 140452 E 19910205 ES 2090150 Т3 ES 1991-101497 19961016 19910205 FI 9100602 Α 19910811 FI 1991-602 19910207 BR 9100520 Α 19911029 BR 1991-520 19910207 CA 2035988 AA 19910811 CA 1991-2035988 19910208 NO 9100496 19910812 NO 1991-496 Α 19910208 AU 9170848 AU 1991-70848 A1 19910815 19910208 AU 634342 B2 19930218 HU 56549 A2 19910930 HU 1991-415 19910208 HU 207997 В 19930728 ZA 9100948 Α 19911030 ZA 1991-948 19910208 JP 04316561 **A2** 19921106 JP 1991-60750 19910208 JP 3026847 B2 20000327 US 5232922 Α 19930803 US 1991-652606 19910208 CN 1053919 Α 19910821 CN 1991-100969 19910209 US 5356922 US 1993-57887 19930507 Α 19941018 PRAI DE 1990-4004061 Α 19900210 US 1991-652606 **A3** 19910208 OS MARPAT 115:232247

AB The title compds. [I; R1 = alkyl; R2,R3 = H, halo, alkyl; X = OH, NR4R5; R4 = H, (un)substituted alkyl; R5 = phenylalkyl, (un)substituted alkyl, etc.] were prepd. Thus, 1-methyl-2-imidazolesulfonyl chloride was condensed with 2-morpholinoethylamine to give title compd. II.HCl which gave 45% inhibition of laser-induced thromboses in rats at 10 mg/kg orally.

IT 137048-49-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as antithrombotic agent)

RN 137048-49-8 CAPLUS

CN 1H-Imidazole-4-sulfonamide, 1-methyl-N-[3-[4-(phenylmethyl)-1-piperazinyl]propyl]-, monohydrochloride (9CI) (CA INDEX NAME)

GI

L8 ANSWER 68 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1991:583316 CAPLUS

DN 115:183316

TI Preparation and formulation of thiadiazolo[4,3,2-ij]quinolines and analogs as serotonin antagonists

IN Comte, Marie Therese; Gueremy, Claude; Malleron, Jean Luc; Peyronnel, Jean Francois; Truchon, Alain

PA Rhone-Poulenc Sante, Fr.

SO Eur. Pat. Appl., 19 pp.

CODEN: EPXXDW

DT Patent

LA French

FAN.CNT 1

raw.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 433149 EP 433149	A2 A3	19920318	EP 1990-403502	19901210
	R: AT, BE, CH,	•		GR, IT, LI, LU, NL,	
	FR 2655652 FR 2655652			FR 1989-16459	19091213
				FR 1990-6943	
	AT 101612				19901210
	ES 2062465 CA 2032104	T3 AA	19941216	ES 1990-403502 CA 1990-2032104	19901210 19901212
	FI 9006108	A			
	NO 9005368	A	19910614	NO 1990-5368	
	AU 9067981	A1	19910620	AU 1990-67981	19901212
	AU 643241	B2	19931111	1000 0040	10001010
	HU 56566 HU 209301	A2 B	19910930 19940428	HU 1990-8242	19901212
	ZA 9009982	A	19911030	ZA 1990-9982	19901212
	JP 03255063	A2	19911113	JP 1990-410112	
	US 5130313	A	19920714	US 1990-627101	19901213
PRAI	FR 1989-16459	Α	19891213		

FR 1990-6943 A 19900605 EP 1990-403502 A 19901210

OS MARPAT 115:183316

GI

$$Q^{1} = Q^{2} = Q^{2$$

AB R2R3N(CH2)nR1 [I; R1 = (substituted) 1,2,3,6-tetrahydro-1-pyridyl, 1-piperazinyl, etc.; R2 = SO2R4; R4 = alkyl, Ph; R3 = Ph, naphthyl; or NR2R3 = Q1, Q2, etc.; n = 2 to 4] were prepd. I are useful as serotonin antagonists (no data). Treatment of 5,6-dihydro-1H,4H-1,2,5-thiadiazolo[4,3,2-ij]quinoline 2,2-dioxide with NaH, followed by reaction with 1-(3-chloropropyl)-4-phenyl-1,2,3,6-tetrahydropyridine, gave 1-[3-(4-phenyl-1,2,3,6-tetrahydro-1-pyridyl)propyl]-5,6-dihydro-1H,4H-1,2,5-thiadiazolo[4,3,2-ij]quinoline 2,2-dioxide.

IT 136481-56-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

RN 136481-56-6 CAPLUS

CN Methanesulfonamide, N-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-N-1-naphthalenyl- (9CI) (CA INDEX NAME)

L8 ANSWER 69 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1991:429363 CAPLUS

DN 115:29363

TI Preparation of pyrimidinedione derivatives as antiarrhythmic agents

IN Katakami, Tsutomu; Yokoyama, Tatsuro; Miyamoto, Michihiko; Mori, Haruki; Kawauchi, Nobuya; Nobori, Tadahito; Sannohe, Kunio; Kamiya, Joji; Ishii,

Masaaki; Yoshihara, Kanji PA Mitsui Toatsu Chemicals, Inc., Japan Eur. Pat. Appl., 225 pp. CODEN: EPXXDW DΤ Patent LA English FAN.CNT 2 KIND DATE APPLICATION NO. PATENT NO. DATE ----\_\_\_\_\_\_ EP 369627 A2 19900523 EP 1989-311135 EP 369627 A3 19901212 EP 369627 B1 19941221 PΙ 19891027 EP 369627 B1 19941221
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE
CA 2001389 AA 19900429 CA 1989-2001389 19891024
CA 2001389 C 19980210
US 5008267 A 19910416 US 1989-425730 19891027
DK 8905357 A 19900430 DK 1989-5357 19891027
DK 170203 B1 19950612
NO 8904299 A 19900430 NO 1989-4299 19891027
NO 174711 B 19940314
NO 174711 C 19940622
AU 8943869 A1 19900531 AU 1989-43869 19891027
AU 613805 B2 19910808
HU 52764 A2 19900828 HU 1989-5468 19891027
HU 210780 B 19950728
ES 2066000 T3 19950728
ES 2066000 T3 19950728
ES 2066000 T3 19950301 ES 1989-311135 19891027
FI 95245 B 19950728
FI 95245 C 19960110
JP 03173873 A2 19910729 JP 1989-5121 19891027
FI 95245 C 19960110
JP 03173873 A2 19910729 JP 1989-279827 19891030
JP 06088982 B4 19941109
JP 03112948 A2 19910729 JP 1989-279827 19891030
JP 1988-306840 A 19881026
JP 1988-306841 A 19881026
JP 1988-306841 A 19881026
JP 1988-306841 A 19890418
JP 1989-96416 A 19890418
JP 1989-96417 A 19890418
JP 1989-96418 A 19890418
JP 1989-246317 A 19890906
JP 1989-246318 A 19890905
JP 1989-246318 A 19890905
JP 1989-246318 A 19890925
JP 1989-246318 A 19890925
JP 1989-246318 A 19890925
GS MARPAT 115:29363
GI R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE GI

$$\begin{array}{c} X3 & O \\ X^{1} & \\ X^{2} & \\ \end{array}$$

$$\begin{array}{c} X^{3} & O \\ \\ NR^{2} & \\ \\ NR^{3} & \\ \end{array}$$

$$\begin{array}{c} NR^{4} \\ \\ R^{3} & \\ \end{array}$$

$$O_2N$$
 — (CH<sub>2</sub>) 3NEtCH<sub>2</sub>CH<sub>2</sub>NH — NMe NMe O II

AB Title compds. I [A = (CH2)m, alkoxy, alkylthio, alkylaminocarbonyl, piperidinediyl, CH2NH, O2C, etc.; m = 0-4; R1, R2 = H, alkoxycarbonyl, (unsatd.) (substituted) alkyl, mono(di)alkylamino, alkoxy, (substituted) Ph, etc.; or R1R2 = alkylene and thus forming a heterocyclyl; R3, R4 = H, alkyl; X1, X2 = H, halo, alkyl, alkylcarbonyl, etc.; X3 = H, O2N, Me, cyano, etc.; n = 2,3] or a salt thereof are prepd. N-Ethyl-N-3-(4-nitrophenyl)propylamine (prepn. given) and 6-(1-aziridinyl)-1,3-dimethyl-2,4-(1H,3H)-pyrimidinedione (prepn. given) were concd. under reduced pressure and reacted with Amberylst to give the pyrimidinone II, as the HCl salt (III). In tests for pharmacol. activity by influence on myocardial action potential duration time (APD75) and influence on ventricular muscle refractory period (ERF) the dose of III at 1.0 .mu.g/mL showed ADP75 11% and ERP 16.7%. Pharmaceutical formulations of I are given.

### IT 130634-73-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of, as antiarrhythmic)

RN 130634-73-0 CAPLUS

CN Methanesulfonamide, N-(4-nitrophenyl)-N-[3-[4-(1,2,3,6-tetrahydro-1,3-dimethyl-2,6-dioxo-4-pyrimidinyl)-1-piperazinyl]propyl]- (9CI) (CA INDEX NAME)

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r_8
    ANSWER 70 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN
    1991:247309 CAPLUS
AN
DN
    114:247309
    Preparation of pyrimidylpiperazines as agents for treatment of brain and
ΤI
    spinal cord ischemia
IN
    Yevich, Joseph P.; Dextraze, Pierre
PA
    Bristol-Myers Squibb Co., USA
so
    Eur. Pat. Appl., 35 pp.
    CODEN: EPXXDW
DT
    Patent
LΑ
    English
FAN.CNT 1
    PATENT NO.
                      KIND
                                       APPLICATION NO.
                             DATE
                                                            DATE
                      ____
                             -----
    EP 400661
                      A1 19901205 EP 1990-110399
PΙ
                                                            19900531
       R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
                            19910219 US 1990-503197
    US 4994460
              Α
                                                            19900330
    CA 2017596
                                        CA 1990-2017596
                       AA
                             19901201
                                                             19900525
    JP 03047172
                      A2
                             19910228
                                       JP 1990-141756
                                                            19900601
                      Α
PRAI US 1989-360657
                             19890601
    US 1990-503197
                      Α
                             19900330
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os

GΙ

MARPAT 114:247309

$$ZX (CH_2)_n - N \longrightarrow R^3$$

$$R^2 \qquad HN \qquad N \longrightarrow F$$

$$III$$

$$Q^{1=} \qquad Q^{2=} \qquad Q^{2=} \qquad Q^{2=}$$

AB The title compds. I (Z = 4-FC6H4, Q1, naphthalenyl, etc.; X = 0, S, SO2, etc.; Z and X taken together can be Q2; R1 = H, alkyl; R2 = halo; R3 = H, alkoxy, alkylthio; n = 1-3; and m = 0 or 1; a proviso is given) were prepd. A mixt. of piperazine II, 4-FC6H4(CH2)4Cl, K2CO3, and MeCN was refluxed for 40 h to give piperazine III (n = 4). III (n = 1) at 40 mg/kg i.p. gave protection (up to 25% survival) in rats subjected to the anoxic nitrogen test.

IT 133982-23-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, for treatment of brain ischemia)

RN 133982-23-7 CAPLUS

CN Benzenesulfonamide, 4-fluoro-N-[1-(4-fluorophenyl)-4-[4-(5-fluoro-2-pyrimidinyl)-1-piperazinyl]butyl]- (9CI) (CA INDEX NAME)

- L8 ANSWER 71 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1991:228960 CAPLUS
- DN 114:228960
- TI 2-[[(4-Phenyl-1-piperazinyl)alkyl]amino]-5-ethynylpyrimidine derivatives, their intermediates, and preparation of the intermediates
- IN Isobe, Toshio; Nagao, Takashi; Takashi, Yoshiho; Miyagaki, Mitsuhiro; Ito, Shigeru; Azuma, Hiroshi; Ishikawa, Masayuki
- PA Shiratori Pharmaceutical Co., Ltd., Japan; Hitachi Chemical Co., Ltd.
- SO Jpn. Kokai Tokkyo Koho, 6 pp. CODEN: JKXXAF

GI

DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PI JP 03007266	A2	19910114	JP 1989-140408	19890602		
JP 2704231	B2	19980126				
PRAI JP 1989-140408		19890602				
OS MARPAT 114:228960						

$$HC \equiv C$$
 $N$ 
 $NH (CH2) n-N$ 
 $N$ 
 $N$ 

The title derivs. I [R1 = lower alkyl, (un) substituted phenyl; R2 = alkoxy; n = 2-4], useful as antihypertensives, their intermediates ethynylhalopyrimidiines II (X = halo), and a process for the prepn. of II by treatment of acetyldihydropyrimidinones III with halogenating agents are claimed. A mixt. of POCl3 and III (R1 = Me) was refluxed for 15.5 h to give 65% II (R1 = Me, X = Cl), which was further treated with 2-[4-(2-methoxyphenyl)-1-piperazinyl]ethylamine and Et3N in MeCN under reflux for 7 h to give 95% I (R1 = Me, R2 = OMe, n = 2) (IV). An aq. soln. of IV mesylate was applied to the right carotid of an anesthetized rabbit at 100 .mu.g/0.1 mL/kg; the antihypertensive activity was 12.5 mmH.

IT 133894-03-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of, as antihypertensive)

RN 133894-03-8 CAPLUS

CN Methanesulfonamide, N-(5-ethynyl-4,6-dimethyl-2-pyrimidinyl)-N-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

L8 ANSWER 72 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1990:549578 CAPLUS

DN 113:149578

TI Effect of a new calcium-calmodulin-dependent protein kinase II inhibitor on GABA release in cerebrospinal fluid of the rat

AU Ishikawa, Naohisa; Hashiba, Yukihiro; Hidaka, Hiroyoshi

CS Sch. Med., Nagoya Univ., Nagoya, 466, Japan

SO Journal of Pharmacology and Experimental Therapeutics (1990), 254(2), 598-602

CODEN: JPETAB; ISSN: 0022-3565

DT Journal

LA English

AB The role of Ca2+-calmodulin-dependent protein kinase II (CaM kinase II) in the central nervous system has been studied with special ref. to the effect of CaM kinase II inhibitor on GABA release. Two different selective inhibitors of Ca2+-calmodulin-dependent enzymes such as a calmodulin antagonist, W 7, and a newly synthesized selective inhibitor of CaM kinase II, KN 62 were used. N-[1-[p-(5-Isoquinolinesulfonyl)benzyl]-2-(4-phenylpiperazinyl)ethyl]-5-isoquinolinesulfonamide (KN 04), a deriv. of KN 62, which has a much lower inhibitory activity on the enzyme, was also synthesized for use as a control. Although i.v. injection of the drugs did not produce any effect, infusion of W 7 or KN 62 into the 4th ventricle of the rat caused hypertension and tachycardia, assocd. with the diminished rate of GABA release in cerebrospinal fluid. The ability of KN 62 to produce these effects was more potent than that of W 7. Intracisternal infusion of KN 04 influenced neither systemic blood pressure nor GABA release at the concn. up to 100 .mu.M. The same order of potencies of 3 agents (KN 62 > W 7 .mchgt. KN 04) has been obtained in their effects on either in vitro CaM kinase II activity, the in vivo autonomic nervous system, or the rate of GABA release. Thus, CaM kinase II inhibitors such as KN 62 administered into the 4th ventricle decreased the rate of GABA release into the cerebrospinal fluid, enhancing the autonomic nervous function, and these effects were closely related to

# 10/768579

their inhibitory action on CaM kinase II activity.

IT 129695-80-3, KN 04

RL: BIOL (Biological study)

(cardiovascular system and GABA release into cerebrospinal fluid responses to, calmodulin kinase II inhibition in relation to)

RN 129695-80-3 CAPLUS

CN 5-Isoquinolinesulfonic acid, 4-[2-[(5-isoquinolinylsulfonyl)amino]-3-(4-phenyl-1-piperazinyl)propyl]phenyl ester (9CI) (CA INDEX NAME)

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PAGE 2-A

- L8 ANSWER 73 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1990:139052 CAPLUS
- DN 112:139052
- TI Preparation of arylsulfonylpiperazines as antiinflammatories
- IN Abou-Gharbia, Magid A.
- PA American Home Products Corp., Japan
- SO U.S., 4 pp. CODEN: USXXAM
- DT Patent
- LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	AP	PLICATION NO.	DATE		
PI	US 4857644	Α	19890815	US	1988-204459	19880609		
PRAI	US 1988-204459		19880609					
os	CASREACT 112:139052	MARPA	r 112:139052					
GT								

$$z-(CH_2)_m-N$$
 $N-R^4$ 
 $SO_2C1$ 
OMe II

The title compds. [I; R1, R2 = H, C1-6 alkyl, Ph; R1R2 = (CH2)4, CH2CH:CHCH:CHCH2, bond; R3 = H, halo, C1-6 alkyl, alkoxy; R4 = PhCH2, (un)substituted Ph, pyridinyl, pyrimidinyl, pyrazinyl; Z = SO2, SO2NR5; R5 = H, C1-6 alkyl; m = 0-4; n = 0-2] and their pharmaceutically acceptable salts were prepd. as antiinflammatories, e.g., by acylation of piperazines with arylsulfonyl chlorides. Thus, a soln. of 5-methoxyindan in MeCN was added dropwise over 0.5 h to a cooled and stirred soln. of C1SO3H, followed by heating 3 h at 50-60.degree. The intermediate chlorosulfonated indan (II) in CH2C12 was treated with 1-(2-pyrimidinyl)piperazine dihydrochloride and Et3N, and stirred overnight to give I (R1, R2 = H, R3 = 6-MeO; Z = SO2; R4 = 2-pyrimidinyl, m, n = 0) which was converted to its hydrochloride. The latter at 50 mg/kg p.o. gave 55% inhibition of the acute inflammatory response in the rat carrageenan paw edema assay.

IT 125295-93-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and neutralization of, in prepn. of antiinflammatory)

RN 125295-93-4 CAPLUS

CN 1H-Indene-5-sulfonamide, 2,3-dihydro-6-methoxy-N-[2-[4-(2-pyrimidinyl)-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

L8 ANSWER 74 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN AN 1990:98558 CAPLUS

### 10/768579

DN 112:98558

TI Preparation and testing of N-[(arylsulfamido)alkyl]piperazines as cardiovascular agents

IN Tanabe, Sohei; Sato, Seiichi; Kyotani, Yoshinori; Ohta, Tomio; Uchida, Kasumi

PA Kowa Co., Ltd., Japan

SO Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN. CNT 1

FAN.	CNT I				
	PATENT NO.	KIND DATE		APPLICATION NO.	DATE
PI	EP 330065	A1	19890830	EP 1989-102586	19890215
	EP 330065	В1	19931110		
	R: BE, CH, DE,	FR, GB	, IT, LI, NL	, SE	
	JP 01211567	A2	19890824	JP 1988-33949	19880218
	JP 2556722	B2	19961120		
	US 4948892	Α	19900814	US 1989-310684	19890215
PRAI	JP 1988-33949	A	19880218		
os	MARPAT 112:98558				
GI					
os	R: BE, CH, DE, JP 01211567 JP 2556722 US 4948892 JP 1988-33949	FR, GB, A2 B2 A	, IT, LI, NL, 19890824 19961120 19900814	JP 1988-33949	

AB The title compds. [I; R1-R3 = H, halo, alkyl, alkoxy; R4 = H, alkyl, (substituted) aralkyl; R5 = (substituted) aryl, aralkyl; R6, R7 = H, alkyl, alkoxy; n = 1-8], useful as cardiovascular agents, were prepd. Thus, 1-diphenylmethyl-4-(3-aminopropyl)piperazine and Et3N in CH2C12 were treated with PhSO2Cl with ice cooling to give the sulfonamide which, in DMF, was treated with NaH and PhCH2Cl to give piperazine II. I inhibited 3,4-diaminopyridine-induced contraction of dog coronary artery rings at 10-6M. I also inhibited ADP-induced aggregation of rabbit platelet-rich plasma.

IT 125393-61-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of, as cardiovascular agent)

RN 125393-61-5 CAPLUS

CN Benzenesulfonamide, N-[3-[4-(phenylmethyl)-1-piperazinyl]propyl]-, dihydrochloride (9CI) (CA INDEX NAME)

# ●2 HCl

L8 ANSWER 75 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1986:478925 CAPLUS

DN 105:78925

TI Benzothiazolylbenzenesulfonamide derivatives

IN Hidaka, Hiroyoshi; Kawamatsu, Yutaka; Sugihara, Hirosada

PA Takeda Chemical Industries, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

FAM.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PI	JP 61050975	A2	19860313	JP 1984-173922	19840820		
	JP 05022706	В4	19930330				
PRAI GI	JP 1984-173922		19840820				

AB Title compds. I [R, Rl = H, lower alkoxy; R2, R3 = lower alkyl, (un)substituted aralkyl; NR2R3 = a ring; Z = alkylene] and their salts, useful as cerebro- and cardiovascular dilating agents, neoplasm inhibitors, and diarrhea inhibitors, were prepd. Thus, stirring 3.0 g phenylbenzothiazole deriv. II (R4 = H) with 9 mL ClSO3H at -20 to -10.degree. gave 3.6 g II (R4 = SO2Cl), which (2.0 g) was stirred with 1.3 g 3-(4-phenylpiperazinyl)propylamine in CHCl3 contg. 1.6 mL Et3N at room temp. for 2 h to give, after treatment with HCl, 1.6 g I-HCl [R = Rl = OMe, NR2R3 = 4-phenyl-1-piperazinyl, Z = (CH2)2], which dilated rabbit mesenteric artery in vitro (ED50 2.2 .mu.M).

# 10/768579

IT 103625-76-9P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as cerebral and cardiovascular dilating agents, neoplasm inhibitors, and diarrhea inhibitors)

RN 103625-76-9 CAPLUS

CN Benzenesulfonamide, 3-(2-benzothiazolyl)-4,5-dimethoxy-N-[3-(4-phenyl-1-piperazinyl)propyl]-, hydrochloride (9CI) (CA INDEX NAME)

# ●x HCl

L8 ANSWER 76 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1986:148911 CAPLUS

DN 104:148911

TI Phenylpiperazine derivatives and their acid addition salts

IN Fukami, Harukazu; Kikumoto, Ryoji; Nakao, Kenichiro; Nitta, Issei; Inoue, Shinya

PA Mitsubishi Chemical Industries Co., Ltd., Japan

SO Eur. Pat. Appl., 56 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

FAN.	FAN.CNT 1 PATENT NO.		DATE	APPLICATION NO.	DATE
PI	EP 161498	A1	19851121	EP 1985-104477	19850412
	EP 161498	B1	19881012		
	R: BE, CH, DE,	FR, GB	, IT, LI, NL	, SE	
	JP 60222467	A2	19851107	JP 1984-77006	19840417
	JP 05045586	B4	19930709		
	JP 61083178	A2	19860426	JP 1984-203743	19840928
	JP 05082388	B4	19931118		
	JP 61087675	A2	19860506	JP 1984-209133	19841005
	JP 05046341	<b>B4</b>	19930713		
	JP 61161268	A2	19860721	JP 1985-1246	19850108
	JP 05082386	B4	19931118		•
	US 4716161	Α	19871229	US 1985-719456	19850403
	DK 8501619	Α	19851018	DK 1985-1619	19850410
	DK 158518	В	19900528		
	DK 158518	С	19901105		
	HU 37615	A2	19860123	HU 1985-1384	19850415
	HU 193361	В	19870928		
	CA 1287051	A1	19910730	CA 1985-479278	19850416
PRAI	JP 1984-77006	Α	19840417		
	JP 1984-203743	Α	19840928		

JP 1984-209133 A 19841005 JP 1985-1246 A 19850108 OS CASREACT 104:148911; MARPAT 104:148911 GI

$$\begin{array}{c|c}
R^1 & Y & N (CH_2) & N \\
R^2 & N & Q & R^{50}
\end{array}$$

AB (Piperazinylalkyl)quinazolinediones and -benzothiadiazinones I [R1, R2 = H, alkoxy, NH2, AcNH, MeSO2NH, H2NCONH; R3 = H, alkoxy; R1R2, R2R3 = O(CH2)mO; R4,R5 = H, alkyl; Y = CO, S(O)2; n = 2-4; m = 1-3] were prepd. Thus, 6,7-dimethoxy-2,4(1H,3H)-quinazolinedione in DMF was treated with NaH and 1-(2-chloroethyl)-4-(2-methoxyphenyl)piperazine and stirred 6 h at 70.degree. to give 35% I (R1 = R2 = MeO, R3 = R4 = H, R5 = Me, Y = CO, n = 2) (II). In rats 3 mg II/kg orally reduced blood pressure 41.8%.

Ι

RN 101389-49-5 CAPLUS

CN 2H-1,5-Benzodioxepin-7-sulfonamide, 8-amino-3,4-dihydro-N-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

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L8 ANSWER 77 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1985:220896 CAPLUS

DN 102:220896

TI 2-Pyrimidinyl-1-piperazine derivatives and pharmaceuticals containing them

IN Dompert, Wolfgang; Glaser, Thomas; Horstmann, Harald; Schuurman, Teunis; Seidel, Peter Rudolf; Traber, Joerg

PA Troponwerke G.m.b.H. und Co. K.-G., Fed. Rep. Ger.

SO Ger. Offen., 121 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
ΡI	DE 3321969	A1	19841220	DE 1983-3321969	19830618		

		129128		A2		EP	1984-106336	19840604
		129128		A3				
	ΕP	129128		B1	19901122			
		R: AT, BE,	CH,	DE,	FR, GB, IT,			
		58534		E	19901215	AT	1984-106336	19840604
	AU	8429293		A1	19841220	AU	1984-29293	19840612
	AU	569086		B2	19880121			
	ES	533338		A1	19850801	ES	1984-533338	19840612
	FI	8402419		Α	19841219	FI	1984-2419	19840614
	FI	82936		В	19910131			
	FI	82936		С	19910510			
	DK	8402959		Α	19841219	DK	1984-2959	19840615
	DK	165447		В	19921130			
	DK	165447		С	19930413			
	HU	34746		0	19850429	HU	1984-2325	19840615
		196391		В	19881128			
	IL	72120		A1	19890928	IL	1984-72120	19840615
		1300624		A1	19920512		1984-456741	19840615
		60023373		A2	19850205		1984-123884	19840618
		06060165		В4	19940810			
		8404585		Α	19850227	ZA	1984-4585	19840618
		542320		A1	19851216		1985-542320	19850416
		542321		A1	19851216	ES	1985-542321	19850416
		542322		A1	19851216		1985-542322	19850416
		542323		A1	19851216		1985-542323	19850416
	ES	542319		A1	19860601		1985-542319	19850416
	US	4818756		Α	19890404	US	1986-838238	19860310
		4937343		Α	19900626		1988-247813	19880922
	US	4988809		Α	19910129	US	1990-482580	19900221
		5187276		Α	19930216		1990-619270	19901128
		9200310		Α	19920306		1992-310	19920306
		168740		В1	19940530			
		5314884		Α	19940524	US	1992-938187	19920831
PRAI		1983-3321969		A	19830618			
		1984-106336		Α	19840604			
		1984-617858		A3	19840606			
		1986-838238		A3	19860310			
		1988-247813		A3	19880922			
		1990-482580		A3	19900221			
		1990-619270		A3	19901128			
os		SREACT 102:220	896					
GI								

$$R \longrightarrow N \longrightarrow N \longrightarrow N \longrightarrow N \longrightarrow R^2$$

AB The title compds. [I; R = H, halo, OH, NO2, cyano, amino, alkylthio aralkyl, (un) substituted alkyl, aryl, heteroaryl, alkoxy; R1, R2 = H, aralkyl, cycloalkyl, PhO, halo, OH, NO2, alkylthio, PhS, cyano, CO2H alkoxycarbonyl, carbamoyl, sulfamoyl, (un) substituted alkyl, aryl, alkoxy; X = CO, SO2, COCH2, CONR3; R3 = H, (un) substituted alkyl, aryl; X1 = CO, SO2] were prepd. Thus, (N-(4-bromobutyl) phthalimide was stirred under N

# 10/768579

at 120-130.degree. with 1-(2-pyrimidinyl)piperazine to give 96% I (R-R2 = H, X = X1 = CO). Selected I are antidepressants, inhibiting tetrabenazine-induced ptosis in mice with an ED50 of 5-40 mg/kg i.p.

IT 95847-25-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and cyclocondensation of, with phosgene)

RN 95847-25-9 CAPLUS

Benzenesulfonamide, 2-amino-N-[4-[4-(2-pyrimidinyl)-1-piperazinyl]butyl]-CN (9CI) (CA INDEX NAME)

L8 ANSWER 78 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

ΑN 1984:490978 CAPLUS

DN 101:90978

Piperazine derivatives

Sumitomo Chemical Co., Ltd., Japan PA

Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LΑ Japanese

FAN. CNT 1

PI	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
	JP 59029665 JP 1982-140297	A2	19840216 19820811	JP 1982-140297	19820811	

$$RR^{1}N(CH_{2})_{n}N$$
 $NR^{2}$ 
 $H_{2}N(CH_{2})_{n}N$ 
 $NR^{2}$ 
 $I$ 

Twenty-one piperazine derivs. I [R = R3Z; R1 = H, R4Z1 (R3, R4 = alkyl,AB

aryl, alkoxy, PhO, PhCH2O, H, NH2; Z, Z1 = SO2, CO); n = 2-4; R2 = 2-pyridyl, 2-pyrimidinyl] were prepd. by, e.g., reaction of R5ZX (R5 = alkyl, aryl, alkoxy, PhO, PhCH2O, X = halo) with II. I has antianxiety activity (no data). Thus, 692 mg ClCO2Et in Et2O was added to a mixt. of 1 g II (n = 4, R2 = 2-pyrimidinyl) and 680 mg Et3N in Et2O-THF with ice cooling and the mixt. kept at 4.degree. to give 38.5% I.cntdot.HCl (R = EtO2C, R1 = H, n = 4, R2 = 2-pyrimidinyl).

IT 91517-07-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

RN 91517-07-6 CAPLUS

CN Methanesulfonamide, N-[4-[4-(2-pyrimidinyl)-1-piperazinyl]butyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HC1

L8 ANSWER 79 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1984:6557 CAPLUS

DN 100:6557

TI 1-Phenylpiperazine derivatives having antiaggressive activity

IN Van Dalen-Van der Aa, Dirkje A.; Hulkenberg, Antonius

PA Duphar International Research B. V., Neth.

SO Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

T. WILLY	CNII				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PΊ	EP 89089	A1	19830921	EP 1983-200346	19830311
	R: AT, BE, CH,	DE, FR	, GB, IT, LI	, LU, NL, SE	
	DK 8301016	A	19830913	DK 1983-1016	19830228
	ES 520439	A1	19840416	ES 1983-520439	19830309
	ZA 8301625	Α	19841031	ZA 1983-1625	19830309
	AU 8312334	A1	19830915	AU 1983-12334	19830310
	JP 58180478	A2	19831021	JP 1983-38414	19830310
PRAI	NL 1982-1032	Α	19820312		
os	MARPAT 100:6557				

GI

$$\begin{array}{c|c} & & \\ & & \\ & & \\ R & & I \end{array}$$

Piperazines I (R = CF3, Cl; Z = CH2, CH2CH2, CHMeCH2, CH2CHMe; Zl = CH2, CO, SO2; Rl = H, Me, Et; Z2 = CO, SO2; R2 = NH2, alkylamino, dialkylamino, alkyl, cyclohexyl, cyclohexylmethyl, cyclohexyloxymethyl, benzyl, thenyl, pyridylmethyl, PhOCH2, PhSCH2, a 1-phenylcycloalkyl group, alkoxy, cycloalkyloxy, aralkoxy), useful as anti-aggressive agents (no data), were prepd. Thus, a mixt. of ClCH2CH2CONHSO2NH2, 1-[3-(trifluoromethyl)phenyl]piperazine, and Et3N in THF was refluxed to give I (R = CF3, Z = CH2CH2, Zl = CO, Rl = H, Z2 = SO2, R2 = NH2).

IT 88069-02-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

RN 88069-02-7 CAPLUS

CN Methanesulfonamide, N-[2-[4-[3-(trifluoromethyl)phenyl]-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

L8 ANSWER 80 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1981:424983 CAPLUS

DN 95:24983

TI Synthesis of  $N-(3-amino-2-hydroxy\ propyl)-N-sulfonylanilines derivatives. Potential antianginal activities$ 

AU Goldenberg, Charles; Van Meerbeeck, Clement; Wandestrick, Raymond; Descamps, Marcel; Tornay, Chantal; Dirks, Michel; Colot, Michel; De Claviere, Michel

CS Cent. Rech. S.A., Labaz N.V., Brussels, B-1120, Belg.

SO European Journal of Medicinal Chemistry (1980), 15(6), 545-50 CODEN: EJMCA5; ISSN: 0009-4374

DT Journal

LA French

OS CASREACT 95:24983

GI

$$R^1$$
 $N (SO_2R^2) CH_2CH (OH) CH_2NR^3R^4$ 

The title compds. I [R = 2-allyloxy, 4-AcNH, 4-H2NCOCH2, R1 = H; R = 2-Cl, R1 = 6-Cl; R = 3-Cl, R1 = 4-Cl; R2 = Me, 4-MeC6H4, 4-MeOC6H4, Ph; R3 = H, R4 = CHMe2, CMe3, CH2CH2OPh, (CH2)3Ph; NR3R4 = pyrrolidino, morpholino, 4-substituted piperazino] were prepd. by sulfonylating RR1C6H3NH2, treating RR1C6H3NHSO2R2 with epichlorohydrin, and aminolysis. I have both .alpha.- and .beta.-sympatholytic activity.

Ι

T7166-16-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. and sympatholytic activity of)

RN 77166-16-6 CAPLUS
CN Benzenesulfonamide, N-[2-hydroxy-3-[4-(2-pyridinyl)-1-piperazinyl]propyl]4-methyl-N-[2-(2-propenyloxy)phenyl]-, ethanedioate (1:1) (salt) (9CI)
(CA INDEX NAME)

CM 1 CRN 77166-15-5

CRN 77166-15-5 CMF C28 H34 N4 O4 S

CM 2

CRN 144-62-7 CMF C2 H2 O4

L8 ANSWER 81 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN AN 1981:191892 CAPLUS

#### 10/768579

DN 94:191892 Sulfonyl aniline derivatives and their use in therapy ΤI IN Descamps, Marcel; Goldenberg, Charles Omnium Financier Aquitaine pour l'Hygiene et la Sante, Fr. PA SO Eur. Pat. Appl., 25 pp. CODEN: EPXXDW DT Patent LA French FAN.CNT 1 PATENT NO. APPLICATION NO. KIND DATE DATE \_\_\_\_\_\_ ----\_\_\_\_\_ -----\_\_\_\_\_ PΙ EP 22118 A1 19810107 EP 1980-870033 19800610 EP 22118 В1 19830601 R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE A1 19810109 FR 1979-15232 19790614 FR 2459235 FR 2459235 **B1** 19820917 US 4330542 Α 19820518 US 1980-150411 19800516 E AT 3638 19830615 AT 1980-870033 19800610 A2 JP 56032450 19810401 JP 1980-80825 19800613 PRAI FR 1979-15232 A 19790614 19800610 EP 1980-870033 Α CASREACT 94:191892 OS GI

$$R^{1}$$

$$N (SO_{2}R^{2}) CH_{2}CH (OH) CH_{2}NR^{3}R^{4}$$
I

N-Glycidyl-N-sulfonylanilines were treated with amines to yield the resp. N-(3-amino-2-hydroxypropyl)anilines I [R,R1 (same or different) = CH2:CHCH2O, AcNH, carbamoyl, H, Cl; R2 = Me, Ph, methyl- or methoxyphenyl; R3 = H; R4 = CHMe2, CMe3, CH2CH2OPh, (CH2)3Ph; or NR3R4 = pyrrolidino, morpholino, 4-substituted 1-piperazinyl], useful in the treatment of angina pectoris (no data). 2-Allyloxy-N-glycidyl-N-mesylaniline was heated with Me2CHNH2 in EtOH to give I (R = 2-CH2:CHCH2O, R2 = Me, R4 = CHMe2, R1 = R3 = H).

IT 77166-16-6P

RN 77166-16-6 CAPLUS

CN Benzenesulfonamide, N-[2-hydroxy-3-[4-(2-pyridinyl)-1-piperazinyl]propyl]-4-methyl-N-[2-(2-propenyloxy)phenyl]-, ethanedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 77166-15-5 CMF C28 H34 N4 O4 S

CM 2

CRN 144-62-7 CMF C2 H2 O4

L8 ANSWER 82 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1977:495439 CAPLUS

DN 87:95439

TI Substituted trifluoromethyl phenyl piperazines as anorectic agents

AU Cross, Peter E.; Dickinson, Roger P.; Halliwell, Geoffrey; Kemp, John E.

CS Pfizer Cent. Res., Pfizer Ltd., Sandwich/Kent, UK

SO European Journal of Medicinal Chemistry (1977), 12(2), 173-6 CODEN: EJMCA5; ISSN: 0223-5234

DT Journal

LA English

GI For diagram(s), see printed CA Issue.

AB In a series of trifluoromethyl phenyl piperazines possessing cyclo-imido alkyl side chains (I) several compds. possessed good anorectic activity with min. side effects on the central nervous system. The most potent no. of the series was 1-(2-succinimidoethyl)-4-[4'-chloro-3-trifluoromethyl)phenyl]piperazine-HCl (II) [41213-05-2], which was prepd. by heating 1-[4'-chloro-3-(triffluoromethyl)phenyl]piperazine-HCl [63556-37-6] with 2-succinimidoethyl chloride [41212-96-8] in dry dimethylformamide in the presence of base.

IT 63556-39-8P

RN 63556-39-8 CAPLUS

CN Propanoic acid, 3-[[[2-[4-[3-(trifluoromethyl)phenyl]-1-piperazinyl]ethyl]amino]sulfonyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

#### HC1

L8 ANSWER 83 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

1969:87765 CAPLUS AN

DN 70:87765

TI Sedative, antiadrenergic, and hypotensive 2-substituted 2H-1,2,4-benzothiadiazin-3(4H)-one 1,1-dioxides

Hayao, Shin; Strycker, W. G.; Phillips, B. M.; Fujimori, H.; Vidrio, H. ΑU

Ther. Res. Div., Miles Lab., Inc., Elkhart, IN, USA CS

SO Journal of Medicinal Chemistry (1968), 11, 1246-8 CODEN: JMCMAR; ISSN: 0022-2623

DT Journal

LΑ English

GI For diagram(s), see printed CA Issue.

AB Treatment of o-nitro-benzenesulfonyl chloride with amines gave o-nitrobenzenesulfon-amides which were hydrogenated to o-aminobenzenesulfonamides which were cyclized by treatment with COC12 in boiling PhCl to give 2-substituted 2H-1,2,4-benzothiadiazin-3(4H)-one 1,1-dioxides. Similarly, o-aminobenzenesulfonamide was cyclized with urea at 200.degree. or with COCl2 in boiling PhCl to give unsubstituted 2H-1,2,4-benzothiadiazin-3(4H)-one 1,1-dioxide, which was alkylated to qive 2-substituted compds. An ice-cold soln. of 55 g. 1-(3-aminopropyl)-4-(m-fluorophenyl)piperazine in 150 ml. C6H6 and 100 ml. 20% NaOH soln. was treated with a soln. of 51.3 g. o-nitrobenzenesulfonyl chloride in 150 ml. C6H6 and the reaction mixt. stirred 2 hrs. at 25.degree., acidified with dil. HCl, and made basic with NH4OH to give 78.8 g 4-(m-fluorophenyl)-1-[3-(o-nitrobenzenesulfonamido)propyl]piperazin e (I) m. 111-12.degree. (C6H6-hexane). A soln. of 77.5 g. I in 210 ml. HOAc was hydrogenated over 5 g. 10% Pd/C to give 65.2 g. 1-[3-(o-amino-benzenesulfonamido)propyl]-4-(m-fluorophenyl)piperazine (II), m. 119-20.degree. (C6H6-hexane and MeOH). To an ice-cold soln. of 250 ml. PhCl contg. 50.9 g. COC12 was added 44.4 g. II and the suspension refluxed 1 hr. to give 39.0 g. 2-[3-(4-m-fluorophenyl-1piperazinyl)propyl]-2H-1,2,4-benzothiadiazin-3(4H)-one 1,1-dioxide (III) hydrochloride, m. 257-8.degree. (decompn.) (MeOH- HCONMe2). The combined filtrates were concd. in vacuo and made basic with NH4OH to give 12.4 g. III, m. 148-9.degree. (MeOH). A soln. of 34.1 g. 6-chloro-2H-1,2,4benzothiadiazin-3(4H)-one 1,1-dioxide and 23.8 g. NaOMe in 200 ml. abs. EtOH and 100 ml. Me2SO was treated with 45.4 g. 1-(3-chloropropy1)-4phenylpiperazine dihydrochloride and refluxed 20 hrs. The soln. was filtered and the filtrate concd. in vacuo and worked up to give 14.0 g. 6-chloro-2-[3-(4-phenyl-1-piperazinyl)propyl]-2H-1,2,4-benzothiadiazin-3(4H)-one 1,1-dioxide hydrochloride (IV), m. 227-9.degree. (decompn.); free base m. 152-3.degree. (aq. MeOH-HCONMe2). V prepd. were (n, Q, m.p., and m.p. HCl salt given): 3, 4-phenyl-1-piperazinyl, 152-3.degree., 256-7.degree. (decompn.); 3, 4-(m-chlorophenyl)-1-piperazinyl,

149-50.degree., 224-6.degree. (decompn.); 3, 4-(m-trifluoromethylphenyl)-1piperazinyl, 158-9.degree., 262-3.degree. (decompn.); 3, 4-(p-fluorophenyl)-1-piperazinyl, 165-7.degree., 228-30.degree.; 3, 4-phenyl-1-piperidinyl, 161-2.degree., 219-20.degree. (decompn.); 4, 4-(m-chlorophenyl)-1-piperazinyl, 161-3.degree. (decompn.), -; 5, 4-phenyl-1-piperazinyl, 190.degree. (decompn.), -. In exptl. animals, the activity of 2-[3-(4-p-fluorophenyl-1-piperazinyl)propyl]-2H-1,2,4benzothiodiazin-3(4H)-one 1,1-dioxide hydrochloride (VI) as a psychosedative was comparable to that of chlorpromazine and 3-[3-(4-m-chlorophenyl-1-piperazinyl)propyl]-2,4(1H,3H)-quinazolinedione hydrochloride. Except for VI, the compds. showed weaker sedative and hypotensive activities than the corresponding 3-substituted 2,4(1H,3H)-quinazolinediones. Studies of the antiadrenergic and hypotensive activities indicated that the unsubstituted phenylpiperazine and phenylpiperidine derivs. had greater activity than compns. with substituents in the Ph ring. The compds. produced a small decrease in the water and electrolyte excretion in rats.

IT 21920-27-4P

RN 21920-27-4 CAPLUS

CN Benzenesulfonamide, N-[3-[4-(m-fluorophenyl)-1-piperazinyl]propyl]-o-nitro-(8CI) (CA INDEX NAME)

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L8
     ANSWER 84 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN
AN
     1967:10968 CAPLUS
DN
     66:10968
ΤI
     2H-1,2,4-Benzothiadiazine-3(4H)-one 1,1-dioxide derivatives
IN
     Hayao, Shin
PA
     Miles Laboratories, Inc.
SO
     U.S., 6 pp.
     CODEN: USXXAM
DT
     Patent
     English
LΑ
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FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_\_\_ ~~~~~~ ----------US 3267096 ΡI 19660816 19650224

GI For diagram(s), see printed CA Issue.

The title compds. are useful as central as central nervous system AB depressants, antiinflammatory agents, and antihypertensive agents and were prepd. according to the given scheme (n = 3 to 5 and X is H F, Cl, or. F3C). Thus, to an ice cold soln. of 43.8 1-(3-aminopropyl)-4phenylpiperazine in 100 ml. C6H6 and 100 ml. 20% NaOH was added with vigorous stirring a soln. of 44.3 g. o-O2NC6H4SO2Cl in 100 ml. C6H6. brown cloudy soln. was stirred an hr. and acidified with dil. HCl soln. to give a qummy mixt., which was made basic with NH4OH to give a light yellow solid. After filtration, the solid was washed with H2O and Et2O and dried at 50.degree. to give 98% N-[3-(4-phenyl-1-piperazinyl)-propyl]-2nitrobenzenesulfonamide (I), m. 175.degree. (softens at 135.degree.); recrystd. product m. 138-9.degree. [aq. MeOH-HCONMe2 (DMF)], yield 24.9 g. A soln. of 23.9 g. I in 200 ml. HOAc was reduced over 5 g. freshly prepd. 5% Pd-C with shaking overnight. The mixt. was filtered, the solvent removed, the residual sirup cooled in an ice-H2O bath, and basified with concd. NH4OH soln., and the gracy oil taken into CHCl3-Et2O and dried over MgSO4. A satd. soln. of HCl in iso-PrOH, (200 ml.) was added and the product isolated (24.9 g.) was the HCl salt of 2-amino-N-[3-(4-phenyl-1piperazinyl)propyl]benzenesulfonamide, m. 226-8.degree.; the free base (II), m. 117-18.degree.. A slow stream of COC12 was bubbled 60 min. into a boiling soln. of 31.3 g. II in 250 ml. ClPh, the mixt. cooled, and the solid product collected, washed with EtOAc-Et2O and H2O, and air-dried to give 38.2 g. product, m. 226-32.degree.. The product was titurated with aq. NH4OH to yield 35.2 q. 2-[3-4(-phenyl-1-piperazinyl)propyl]-2H-1,2,4benzothiazin-3(4H)-one 1,1-dioxide (III), m. 151-4.degree. (aq. Me2CO). III was dissolved in hot MeOH satd. with HCl to give 26.6 g. III.HCl.-MeOH, m. 256-7.degree.. By a similar sequence of reactions, 76.1 q. 2-nitro-N-[3-(4-m-chlorophenyl-1-piperazinyl)propyl]benzenesulfonamide gave 75.8 g. 2-amino-N-[3-(4-m-chlorophenyl-1piperazinyl)propyl]benzenesulfonamide-HCl.MeOH (IV), m. 155-6.degree. (decompn.) (methanolic HCl-EtOAc). The HCl salt was suspended in H2O, aq. NH4OH added, the orange-yellow gum extd. with CHCl3 to yield 54.8 g. of the free base of IV, m. 105-7.degree.. Reaction with COCl2 in ClPh gave 47.4 g. 2-[3-(4-m-chlorophenyl-1-piperazinyl)propyl]-2H-1,2,4-benzothiazin-3(4H)-one 1,1-dioxide-HCl (V), m. 224-6.degree. (aq. MeOH-DMF). The free base of V (9.5 g.), m. 149-50.degree., was isolated from the filtrate. Likewise, 44 g. 1-m-chlorophenyl-4-(4-aminobutyl)piperazine was converted to 2-nitro-N-[4-m-chlorophenyl-1-piperazinyl)butyl]benzene sulfonamide. Redn. yielded 67.6 g. of the HCl salt of 2-amino-N-[4-(4-m-chlorophenyl-1piperazinyl)butyl]benzenesulfonamide which is converted to the free base on treatment with aq. NH4OH. The free base (51.4 g.) was allowed to react with COC12 to give 44.9 g. 2-[4-(4-m-chlorophenyl-1-piperazinyl)butyl]-2H-1,2,4-benzothiazin-3(4H)-one 1,1-dioxide-HCl (VI), m. 210-16.degree. (decompn.), which on treatment with aq. NH4OH yielded 29.1 g. the free base of VI, m. 133-4.degree., and this base was converted to 33.1 g. of the maleic acid salt, m. 161-3.degree. (decompn.) (EtOAc). The reaction of COC12 in ClPh with 76 g. 2-amino-N-[3-(4-m-trifluoromethylphenyl-1piperazinyl)propyl]benzenesulfonamide gave a product which was dissolved in Et2O and treated with maleic acid to give 91.7 g., m. 173-83.degree. (decompn.), of a crude maleate. It was converted to the free base to give 45 g. 2-[3-(4-m-trifluoro-methylphenyl-1-piperazinyl)propyl]-2H-1,2,4benzothiadiazin-3(4H)-one 1,1-dioxide (VII), m. 141-53.degree. (aq. MeOH). The VII obtained and maleic acid in MeOH gave 28.4 g. VII.C4H4O4, m.

184-5.degree. (MeOH-Et2O), and was converted to 10.7 g. VII.HCl, m. 262-3.degree. (decompn.). 1-(Aminopropyl)-4-phenylpiperidine (40.1 g.) was converted to 59.4 g. 2-nitro-N-[3-(4-phenyl-1piperidinyl)propyl]benzenesulfonamide (VIII), m. 113-14.degree. (aq. MeOH). Redn. of the nitro group in VIII to an amino group, followed by the treatment with COCl2 in ClC6H5 gave 20.8 g. 2-[3-(4-phenyl-1piperidinyl)propyl]-2H-1,2,4-benzothiadiazin-3(4H)-one 1,1-dioxide-HCl.MeOH (IX), m. 219-20.degree. (aq. MeOH). Addn. of aq. NH4OH to the filtrates of the crystn. liquors gave 16 g. of the free base of IX, m. 161-2.degree. (aq. Me2CO). 2-Nitro-N-[5-(4-phenyl-1piperazinyl)pentyl]benzenesulfonamide (X) (77%), m. 128-30.degree. (aq. MeOH-DMF), was obtained from 1-(5-aminopentyl)-4-phenylpiperazine. Redn. of 74.3 q. X with H in the presence of Pd-C gave 54.2 q. 2-amino-N-[5-(4-phenyl-1-piperazinyl)pentyl]benzenesulfonamide, m. 152-3.degree. (Me2CO-CHCl3-n-C6H14), of which 52.9 g. was converted to 22.2 g. 2-[5-(4-phenyl-1-piperazinyl)pentyl]-2H-1,2,4-benzothiadiazin-3(4H)-one 1,1-dioxide-2HCl, m. 190.degree. (decompd. 175.degree.) (MeOH contg. HCl). 1-(3-Aminopropyl)-4-fluorophenylpiperazine (35.6 g.) gave 40.3 g. 2-nitro-N-[3-(4-p-fluorophenyl-1-piperazinyl)propyl]benzenesulfona mide, m. 132-3.degree. (Me2CO-MeOH-n-C6H14), of which 39 g. was reduced to yield 34.2 g. of 2-amino-N-[3-(4-p-fluorophenyl)propyl]benzenesulfonamide, m. 121-2.degree. (aq. MeOH), and 40 g. of this compd. was treated with COC12 to yield 30.2 g. of 2-[3-(4-p-fluorophenyl-1-piperazinyl)propyl]-2H-1,2,4-benzothiadiazin-3(4H)-one 1,1-dioxide-HCl, m. 228-230.degree. (aq. MeOH-EtOAc). Spectral data are included in the analytical results for the new compds.

IT 13349-02-5P

ANSWER 85 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

RN 13349-02-5 CAPLUS

CN Benzenesulfonamide, o-nitro-N-[3-(4-phenyl-1-piperazinyl)propyl]- (8CI) (CA INDEX NAME)

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AN
    1956:32338 CAPLUS
DN
    50:32338
OREF 50:6522c-d
     Phenyl-substituted piperazine compounds
     Fleming, Robert W.; Parcell, Robert F.
IN
     Parke, Davis & Co.
PA
DT
    Patent
    Unavailable
T.A
FAN.CNT 1
                               DATE
     PATENT NO.
                                                                 DATE
                        KIND
                                           APPLICATION NO.
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                               _____
PΙ
    US 2722529
                               19551101
                                           US
AΒ
     See Brit. 721,417 (C.A. 50, 2683i).
     500797-20-6, Methanesulfonamide, N-[3-(4-phenyl-1-
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L8

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·L8
    ANSWER 86 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN
AN
    1956:12597 CAPLUS
DN
    50:12597
OREF 50:2683i,2684a-b
    Phenyl substituted piperazine compounds
PA
     Parke, Davis & Co.
DΨ
    Patent
    Unavailable
LΑ
FAN.CNT 1
     PATENT NO.
                        KIND DATE
                                         APPLICATION NO.
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    GB 721417
                               19550105
PΙ
GI
     For diagram(s), see printed CA Issue.
AB
     In this abstr. R = CH2.CH2.NPh.CH2.CH2.N. RCH2CH2CH2NH2 (21.9 g.) and 100
     cc. EtO2CH is heated under reflux for 2 h., the excess ester removed by
     distn. and the residue recrystd. from C6H6 and petr. ether to yield 8 g.
     RCH2CH2CH2NHCOH, m. 100-1.degree.. The following compds. are also
     described: RCH2CH2CH2CHC12, m. 81-2.degree.; RCH2CH2CH2CH3O2Me (I), m.
     105-7.degree.; I.HBr salt, m. 172-4.degree.; RCH2CH2CH2NHBz, m.
     109-10.degree.; R(CH2)6NHCOH, m. 65-7.degree.; R(CH2)3NHAc, m.
     100-2.degree.; R(CH2)3NHCONH2, m. 146-8.degree.; RCH2CHMeNHAc, m.
     96-8.degree.; R(CH2)3NHCOR' (R' = cyclohexyl), m. 112-14.degree.;
     R(CH2)3NHCO(CH2)5R', m. 90-1.degree.; R(CH2)2NHCOCH2Ph, m. 127-9.degree.;
     RCH2CH2NHCOH, m. 95-6.degree.; RCH2CH2NHAc, m. 105-7.degree.;
     R(CH2) 3NHCOEt, m. 81-2.degree.; R(CH2) 4NHtAc, m. 107-8.degree.;
     R(CH2)5NHAc, m. 86-7.degree.; R(CH2)4NHSO2Me, m. 80-1.degree.;
     R(CH2) 5NHSO2Me, m. 103-5.degree..
IT
     500797-20-6, Methanesulfonamide, N-[3-(4-phenyl-1-
     piperazinyl)propyl]-
        (prepn. of)
RN
     500797-20-6 CAPLUS
     Methanesulfonamide, N-[3-(4-phenyl-1-piperazinyl)propyl]- (9CI) (CA INDEX
CN
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- L3 ANSWER 11 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 2004:675719 CAPLUS
- DN 141:207226
- TI Preparation of arylpiperazinyl sulfonamides as 5-HT, in particular 5-HT1, receptor agonists and antagonists for treating CND disorders, especially anxiety and related diseases
- IN Dhanoa, Dale S.; Chen, Dongli; Becker, Oren; Noiman, Silvia; Cheruku, Srinivasa Rao; Marantz, Yael; Sharadendu, Anurag; Shachem, Sharon; Heifetz, Alexander; Mohanty, Pradyumna; Inbal, Boaz; Fichman, Merav; Nudelman, Raphael; Bar-Haim, Shay
- PA Predix Pharmaceuticals Holdings, Inc., USA
- SO PCT Int. Appl., 125 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.			KIN	DATE		APPLICATION NO.						DATE					
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PI	WO	2004	0697	94		A2		2004	0819	1	WO 2	004-	US28	58		2	0040	202
	WO	2004	0697	94		A3		2004	1104									
	WO	2004	0697	94		C2		2004	1209									
	WO 2004069794 B1			20050127														
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			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI

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RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
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             MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
             GQ, GW, ML, MR, NE, SN, TD, TG
     US 2004220192
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                                                                     20040130
                          A1
                                 20041104
     CA 2513915
                                             CA 2004-2513915
                          AA
                                 20040819
                                                                     20040202
     EP 1592425
                          A2
                                 20051109
                                             EP 2004-707409
                                                                     20040202
         R:
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
PRAI US 2003-443988P
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                                 20030131
     US 2003-458297P
                          Р
                                 20030328
     US 2003-503520P
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                                 20030916
     US 2004-768579
                                 20040130
                          A2
     WO 2004-US2858
                                 20040202
os
     MARPAT 141:207226
GΙ
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AB Title compds. I [wherein R1 = (un)substituted alkyl-aryl, cyclo/alkyl; R2, R3 = independently H, lower alkyl, cycloalkyl, trihalomethyl, halo, etc.; Z = N or C; X = (CH2)m; m = 0-6; Y = (CH2)n; n = 1-6; W = (CH2)p; p = 0-4; N together with one or several carbons from Y = 4-, 5-, 6- or 7-membered hetero/cyclic ring; their pharmaceutically acceptable salts and/or esters, and provided that when p=0, R1 is not (un)substituted aryl and R2, R3 are independently other than alkoxy/phenyl] were prepd. as 5-HT, in particular 5-HT1, receptor agonists and antagonists for treating anxiety and related disorders. Three biol. examples are given. For example, II.bul.2HCl was prepd., in 3 steps, from 1-amino-4-butanol, tosyl chloride, 1-(3-nitrophenyl)piperazine, and HCl. Selected I bound to 5-HT1A receptor with Ki values in the 1.3 - 26 nM range. Thus, I are useful for treating central nervous system disorders such as generalized anxiety disorder, ADD/ADHD, neural injury, stroke, and migraine.

690949-14-5p, 4-Methyl-N-[4-[4-(pyrimidin-2-yl)piperazin-1-IT yl]butyl]benzenesulfonamide 740872-80-4P, 4-Methyl-N-[4-[4-(3nitrophenyl)piperazin-1-yl]butyl]benzenesulfonamide 740872-83-7P , Cyclopropanecarboxylic acid N-[3-[4-[4-[(4-tolylsulfonyl)amino]butyl]pip erazin-1-yl]phenyl]amide 740872-88-2P, N-[3-[4-[4-[(4-Tolylsulfonyl)amino|butyl]piperazin-1-yl]phenyl]acetamide 740872-96-2P, 4-Methyl-N-[4-[4-(pyridin-2-yl)piperazin-1yl]butyl]benzenesulfonamide 740873-08-9P, Cyclopropanecarboxylic acid N-[3-[4-[4-[(cyclohexylmethylsulfonyl)amino]butyl]piperazin-1yl]phenyl]amide 740873-12-5P, N-[3-[4-[4-[(Propan-2ylsulfonyl)amino]butyl]piperazin-1-yl]phenyl]acetamide 740873-15-8P, N-[3-[4-[4-[(2-Methylpropan-1ylsulfonyl)amino]butyl]piperazin-1-yl]phenyl]acetamide 740873-18-19, N-{3-{4-{4-{(Cyclohexylsulfonyl)amino}butyl}piperazi n-1-yl] phenyl] acetamide 740873-25-0P, N-[3-[4-[4-[(Cyclohexylmethylsulfonyl)(methyl)amino]butyl]piperazin-1yl]phenyl]acetamide 740873-29-4P 740873-33-0P, 1-Cyclohexyl-N-(4-(4-(2-methoxyphenyl)piperazin-1yl]butyl]methanesulfonamide 740873-36-3P, 1-Cyclohexyl-N-[4-[4-(3-dimethylaminophenyl)piperazin-1-yl]butyl]methanesulfonamide 740873-40-9P, 1-Cyclohexyl-N-[4-[4-(pyridin-2-yl)piperazin-1yl]butyl]methanesulfonamide 740873-55-6P, N-[3-[4-[4-[(4-Fluorobenzenesulfonyl)amino]butyl]piperazin-1-yl]phenyl]acetamide RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (5-HT1 agonist; prepn. of arylpiperazinyl sulfonamides as 5-HT, in particular 5-HT1, receptor agonists and antagonists for treating anxiety and related disorders) 690949-14-5 CAPLUS RN CN Benzenesulfonamide, 4-methyl-N-[4-[4-(2-pyrimidinyl)-1-piperazinyl]butyl]-(CA INDEX NAME)

$$\begin{array}{c|c}
N & N & CH_2) & 4 - NH - S \\
N & 0 & 0
\end{array}$$

RN 740872-80-4 CAPLUS

CN Benzenesulfonamide, 4-methyl-N-[4-[4-(3-nitrophenyl)-1-piperazinyl]butyl](9CI) (CA INDEX NAME)

RN 740872-83-7 CAPLUS

CN Cyclopropanecarboxamide, N-[3-[4-[4-[(4-methylphenyl)sulfonyl]amino]butyl

]-1-piperazinyl]phenyl]- (9CI) (CA INDEX NAME)

RN 740872-88-2 CAPLUS

CN Acetamide, N-[3-[4-[4-[[(4-methylphenyl)sulfonyl]amino]butyl]-1-piperazinyl]phenyl]- (9CI) (CA INDEX NAME)

Acnh N— (CH<sub>2</sub>) 
$$_4$$
-NH- $_0$  N= 0

RN 740872-96-2 CAPLUS

CN Benzenesulfonamide, 4-methyl-N-[4-[4-(2-pyridinyl)-1-piperazinyl]butyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
N & N & (CH_2)_4 - NH - S \\
0 & 0 & 0
\end{array}$$

RN 740873-08-9 CAPLUS

CN Cyclopropanecarboxamide, N-[3-[4-[4-[[(cyclohexylmethyl)sulfonyl]amino]but yl]-1-piperazinyl]phenyl]- (9CI) (CA INDEX NAME)

RN 740873-12-5 CAPLUS

CN Acetamide, N-[3-[4-[4-[[(1-methylethyl)sulfonyl]amino]butyl]-1-piperazinyl]phenyl]- (9CI) (CA INDEX NAME)

RN 740873-15-8 CAPLUS

CN Acetamide, N-[3-[4-[4-[((2-methylpropyl)sulfonyl]amino]butyl]-1-piperazinyl]phenyl]- (9CI) (CA INDEX NAME)

RN 740873-18-1 CAPLUS

CN Acetamide, N-[3-[4-[4-[(cyclohexylsulfonyl)amino]butyl]-1-piperazinyl]phenyl]- (9CI) (CA INDEX NAME)

N— (CH<sub>2</sub>) 
$$_4$$
-NH- $_0$ 

RN 740873-25-0 CAPLUS

CN Acetamide, N-[3-[4-[4-[[(cyclohexylmethyl)sulfonyl]methylamino]butyl]-1-piperazinyl]phenyl]- (9CI) (CA INDEX NAME)

RN 740873-29-4 CAPLUS

CN Acetamide, N-[3-[4-[4-[methyl[(2-methylpropyl)sulfonyl]amino]butyl]-1-piperazinyl]phenyl]- (9CI) (CA INDEX NAME)

AcNH
$$0 = \begin{array}{c} 0 \\ \parallel \\ S - Bu - i \end{array}$$

$$(CH_2)_4 - N - Me$$

RN 740873-33-0 CAPLUS

CN Cyclohexanemethanesulfonamide, N-[4-[4-(2-methoxyphenyl)-1-piperazinyl]butyl]- (9CI) (CA INDEX NAME)

RN 740873-36-3 CAPLUS

CN Cyclohexanemethanesulfonamide, N-[4-[4-[3-(dimethylamino)phenyl]-1-piperazinyl]butyl]- (9CI) (CA INDEX NAME)

N— (CH<sub>2</sub>) 
$$_4$$
-NH-S-CH<sub>2</sub>

$$_0$$
Me<sub>2</sub>N

RN 740873-40-9 CAPLUS

CN Cyclohexanemethanesulfonamide, N-[4-[4-(2-pyridinyl)-1-piperazinyl]butyl]- (9CI) (CA INDEX NAME)

RN 740873-55-6 CAPLUS

CN Acetamide, N-[3-[4-[4-[[(4-fluorophenyl)sulfonyl]amino]butyl]-1-piperazinyl]phenyl]- (9CI) (CA INDEX NAME)

91517-09-8P, 4-Methyl-N-[4-[4-(pyrimidin-2-yl)piperazin-1-IT yl]butyl]benzenesulfonamide monohydrochloride 740872-84-8P, Cyclopropanecarboxylic acid N-[3-[4-[4-[(4-tolylsulfonyl)amino]butyl]piper azin-1-yl]phenyl]amide dihydrochloride 740872-85-9P, N-{3-[4-[4-[(4-Tolylsulfonyl)amino]butyl]piperazin-1yl-phenyl]isobutyramide 740872-86-0P, N-[3-[4-[4-[(4-Tolylsulfonyl)amino]butyl]piperazin-1-yl]phenyl]butyramide 740872-87-1P, 2,2-Dimethyl-N-[3-[4-[4-[(4toly|sulfonyl)amino|butyl|piperazin-1-yl|phenyl|propionamide 740872-89-3P, N-[3-[4-[4-[(4-Tolylsulfonyl)amino]butyl]piperazin-1yl]phenyl]acetamide dihydrochloride 740872-90-6P, N-[3-[4-[4-[(4-Tolylsulfonyl)amino]butyl]piperazin-1yl]phenyl]propionamide 740872-91-7P, N-[4-[4-[3-[(Methanesulfonyl)amino]phenyl]piperazin-1-yl]butyl]-4methylbenzenesulfonamide 740872-92-8P, 4-Methyl-N-[4-[4-[3-[(propan-2-ylsulfonyl)amino]phenyl]piperazin-1-yl]butyl]benzenesulfonamide **740872-93-9P**, N-[4-[4-[3-[(Ethanesulfonyl)amino]phenyl]piperazin-1yl]butyl]-4-methylbenzenesulfonamide 740872-94-0P, 4-Methyl-N-[4-(4-phenylpiperazin-1-yl)butyl]-5-benzenesulfonamide **740872-95-1P**, 4-Methyl-N-[4-[4-(pyrimidin-2-yl)piperazin-1yl]butyl]benzenesulfonamide dihydrochloride 740872-97-3P, 4-Methyl-N-[4-[4-(pyridin-2-yl)piperazin-1-yl]butyl]benzenesulfonamide trihydrochloride 740872-98-4P, N-[4-[4-(2-Methoxy-5nitrophenyl)piperazin-1-yl]butyl]-4-methylbenzenesulfonamide 740873-07-8P 740873-09-0P 740873-13-6P, N-[3-[4-[4-[(Propan-2-ylsulfonyl)amino]butyl]piperazin-1yl]phenyl]acetamide dihydrochloride 740873-16-9P, N-[3-[4-[4-[(2-Methylpropan-1-ylsulfonyl)amino]butyl]piperazin-1yl]phenyl]acetamide dihydrochloride 740873-19-2P 740873-26-1P, N-[3-[4-[4-[(Cyclohexylmethylsulfonyl)(methyl)amino] butyl]piperazin-1-yl]phenyl]acetamide dihydrochloride 740873-30-7P **740873-34-1P**, 1-Cyclohexyl-N-[4-[4-(2-methoxyphenyl)piperazin-1yl]butyl]methanesulfonamide dihydrochloride 740873-37-4P, 1-Cyclohexyl-N-[4-[4-(3-dimethylaminophenyl)piperazin-1yl]butyl]methanesulfonamide trihydrochloride 740873-41-0P 740873-56-7P 740873-66-9P, 4-Methyl-N-[4-[4-(3nitrophenyl)piperazin-1-yl]butyl]benzenesulfonamide monohydrochloride **740873-67-09**, N-[4-[4-(3-Methoxyphenyl)piperazin-1-yl]butyl]-4methylbenzenesulfonamide 740873-68-1P, 4-Methyl-N-[4-[4-[3-(pyrazin-2-yl)phenyl]piperazin-1-yl]butyl]benzenesulfonamide 740873-69-2P, N-[4-[4-(Biphenyl-3-yl)piperazin-1-yl]butyl]-4methylbenzenesulfonamide 740873-70-5P, 4-Methyl-N-[4-(4phenylpiperazin-1-yl)butyl]benzenesulfonamide 740873-72-7P, Cyclopropanecarboxylic acid N-[3-[4-[4-[4-tolylsulfonyl)amino]butyl]piper azin-1-yl]phenyl]amide monohydrochloride 740873-73-8P, 4-Methyl-N-[4-[4-(pyridin-2-yl)piperazin-1-yl]butyl]benzenesulfonamide monohydrochloride 740873-74-9p, 1-Cyclohexyl-N-[4-[4-(2-

methoxyphenyl)piperazin-1-yl[butyl]methanesulfonamide monohydrochloride

RN

CN

740873-75-0P, N-[3-[4-[4-[(4-Tolylsulfonyl)amino]butyl]piperazin-1yl]phenyl]acetamide monohydrochloride 740873-78-3P, 1-Cyclohexyl-N-[4-[4-(3-dimethylaminophenyl)piperazin-1yl]butyl]methanesulfonamide monohydrochloride 740873-79-4P, 1-Cyclohexyl-N-[4-[4-(pyridin-2-yl)piperazin-1-yl]butyl]methanesulfonamide monohydrochloride 740873-82-9P, N-[3-[4-[4-[(Cyclohexylmethylsulfonyl)amino]butyl]piperazin-1-yl]phenyl]acetamide monohydrochloride RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (5-HT1 agonist; prepn. of arylpiperazinyl sulfonamides as 5-HT, in particular 5-HT1, receptor agonists and antagonists for treating anxiety and related disorders) 91517-09-8 CAPLUS Benzenesulfonamide, 4-methyl-N-[4-[4-(2-pyrimidinyl)-1-piperazinyl]butyl]-, monohydrochloride (9CI) (CA INDEX NAME)

RN 740872-84-8 CAPLUS
CN Cyclopropanecarboxamide, N-[3-[4-[4-[(4-methylphenyl)sulfonyl]amino]butyl
]-1-piperazinyl]phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

### ●2 HCl

RN 740872-85-9 CAPLUS

CN Propanamide, 2-methyl-N-[3-[4-[4-[[(4-methylphenyl)sulfonyl]amino]butyl]-1-piperazinyl]phenyl]- (9CI) (CA INDEX NAME)

RN 740872-86-0 CAPLUS

CN Butanamide, N-[3-[4-[4-[(4-methylphenyl)sulfonyl]amino]butyl]-1-piperazinyl]phenyl]- (9CI) (CA INDEX NAME)

RN 740872-87-1 CAPLUS

CN Propanamide, 2,2-dimethyl-N-[3-[4-[4-[(4-methylphenyl)sulfonyl]amino]buty l]-1-piperazinyl]phenyl]- (9CI) (CA INDEX NAME)

RN 740872-89-3 CAPLUS

CN Acetamide, N-[3-[4-[4-[((4-methylphenyl)sulfonyl]amino]butyl]-1-piperazinyl]phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

Acnh N— (CH<sub>2</sub>) 
$$_4$$
 – NH –  $_5$  0

#### ●2 HC1

RN 740872-90-6 CAPLUS

CN Propanamide, N-[3-[4-[4-[(4-methylphenyl)sulfonyl]amino]butyl]-1-piperazinyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O & N - (CH_2)_4 - NH - S \\
Et - C - NH & O
\end{array}$$

RN 740872-91-7 CAPLUS

CN Benzenesulfonamide, 4-methyl-N-[4-[4-[3-[(methylsulfonyl)amino]phenyl]-1-piperazinyl]butyl]- (9CI) (CA INDEX NAME)

RN 740872-92-8 CAPLUS

CN Benzenesulfonamide, 4-methyl-N-[4-[4-[3-[[(1-methylethyl)sulfonyl]amino]phenyl]-1-piperazinyl]butyl]- (9CI) (CA INDEX NAME)

RN 740872-93-9 CAPLUS

CN Benzenesulfonamide, N-[4-[4-[3-[(ethylsulfonyl)amino]phenyl]-1-

#### 10/768579

piperazinyl]butyl]-4-methyl- (9CI) (CA INDEX NAME)

RN 740872-94-0 CAPLUS

CN Benzenesulfonamide, 2-methyl-N-[4-(4-phenyl-1-piperazinyl)butyl]- (9CI) (CA INDEX NAME)

RN 740872-95-1 CAPLUS

CN Benzenesulfonamide, 4-methyl-N-[4-[4-(2-pyrimidinyl)-1-piperazinyl]butyl]-, dihydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
N & N & CH_2) & 4 - NH - S \\
\hline
0 & 0 & 0
\end{array}$$
Me

#### •2 HCl

RN 740872-97-3 CAPLUS

CN Benzenesulfonamide, 4-methyl-N-[4-[4-(2-pyridinyl)-1-piperazinyl]butyl]-, trihydrochloride (9CI) (CA INDEX NAME)

#### ●3 HCl

RN 740872-98-4 CAPLUS

CN Benzenesulfonamide, N-[4-[4-(2-methoxy-5-nitrophenyl)-1-piperazinyl]butyl]-4-methyl-(9CI) (CA INDEX NAME)

RN 740873-07-8 CAPLUS

CN Acetamide, N-[3-[4-[4-[(cyclohexylmethyl)sulfonyl]amino]butyl]-1-piperazinyl]phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

#### •2 HCl

RN 740873-09-0 CAPLUS

CN Cyclopropanecarboxamide, N-[3-[4-[4-[[(cyclohexylmethyl)sulfonyl]amino]but yl]-1-piperazinyl]phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
0 & & \\
C-NH & & \\
\end{array}$$

$$\begin{array}{c|c}
N- (CH_2)_4-NH-S-CH_2 \\
0
\end{array}$$

#### ●2 HCl

RN 740873-13-6 CAPLUS

CN Acetamide, N-[3-[4-[4-[[(1-methylethyl)sulfonyl]amino]butyl]-1-piperazinyl]phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

## ●2 HCl

RN 740873-16-9 CAPLUS

CN Acetamide, N-[3-[4-[4-[[(2-methylpropyl)sulfonyl]amino]butyl]-1-piperazinyl]phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

#### ●2 HCl

RN 740873-19-2 CAPLUS

CN Acetamide, N-[3-[4-[4-[(cyclohexylsulfonyl)amino]butyl]-1-piperazinyl]phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

N— 
$$(CH_2)_4$$
 –  $NH$  –  $S$  –  $O$  0 –

# ●2 HCl

RN 740873-26-1 CAPLUS

CN Acetamide, N-[3-[4-[4-[[(cyclohexylmethyl)sulfonyl]methylamino]butyl]-1-piperazinyl]phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me O} \\ | & | \\ | & | \\ \text{AcNH} \end{array}$$

## •2 HCl

RN 740873-30-7 CAPLUS

CN Acetamide, N-[3-[4-[4-[methyl](2-methylpropyl)sulfonyl]amino]butyl]-1-piperazinyl]phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

#### ●2 HCl

RN 740873-34-1 CAPLUS

CN Cyclohexanemethanesulfonamide, N-[4-[4-(2-methoxyphenyl)-1-piperazinyl]butyl]-, dihydrochloride (9CI) (CA INDEX NAME)

#### ●2 HCl

RN 740873-37-4 CAPLUS

CN Cyclohexanemethanesulfonamide, N-[4-[4-[3-(dimethylamino)phenyl]-1-piperazinyl]butyl]-, trihydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & O \\
 & N \\
 & N \\
 & N \\
 & O \\$$

#### ●3 HCl

RN 740873-41-0 CAPLUS

CN Cyclohexanemethanesulfonamide, N-[4-[4-(2-pyridinyl)-1-piperazinyl]butyl]-, trihydrochloride (9CI) (CA INDEX NAME)

# ●3 HCl

RN 740873-56-7 CAPLUS

CN Acetamide, N-[3-[4-[4-[[(4-fluorophenyl)sulfonyl]amino]butyl]-1-piperazinyl]phenyl]-, dihydrochloride (9CI) (CA INDEX NAME)

#### ●2 HC1

RN 740873-66-9 CAPLUS

CN Benzenesulfonamide, 4-methyl-N-[4-[4-(3-nitrophenyl)-1-piperazinyl]butyl]-, monohydrochloride (9CI) (CA INDEX NAME)

#### ● HCl

RN 740873-67-0 CAPLUS

CN Benzenesulfonamide, N-[4-[4-(3-methoxyphenyl)-1-piperazinyl]butyl]-4-methyl- (9CI) (CA INDEX NAME)

MeO N— (CH<sub>2</sub>) 4-NH-
$$\frac{0}{0}$$

RN 740873-68-1 CAPLUS

CN Benzenesulfonamide, 4-methyl-N-[4-[4-(3-pyrazinylphenyl)-1-piperazinyl]butyl]- (9CI) (CA'INDEX NAME)

#### 10/768579

RN 740873-69-2 CAPLUS

CN Benzenesulfonamide, N-[4-(4-[1,1'-biphenyl]-3-yl-1-piperazinyl)butyl]-4-methyl- (9CI) (CA INDEX NAME)

Ph 
$$N \longrightarrow (CH_2)_4 - NH - S \longrightarrow 0$$
  $N \longrightarrow N \longrightarrow (CH_2)_4 - NH - S \longrightarrow 0$ 

RN 740873-70-5 CAPLUS

CN Benzenesulfonamide, 4-methyl-N-[4-(4-phenyl-1-piperazinyl)butyl]- (9CI) (CA INDEX NAME)

RN 740873-72-7 CAPLUS

CN Cyclopropanecarboxamide, N-[3-[4-[4-[(4-methylphenyl)sulfonyl]amino]butyl ]-1-piperazinyl]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & O \\
 & O \\
 & C - NH
\end{array}$$

$$\begin{array}{c|c}
 & N - (CH_2)_4 - NH - S \\
 & O \\
 & O \\
 & O \\
\end{array}$$

● HCl

RN 740873-73-8 CAPLUS

CN Benzenesulfonamide, 4-methyl-N-[4-[4-(2-pyridinyl)-1-piperazinyl]butyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
N & N & (CH_2)_4 - NH - S \\
\downarrow 0 & 0
\end{array}$$

#### HCl

RN 740873-74-9 CAPLUS

CN Cyclohexanemethanesulfonamide, N-[4-[4-(2-methoxyphenyl)-1-piperazinyl]butyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & O \\
 & | \\
 & | \\
 & | \\
 & O \\$$

## ● HCl

RN 740873-75-0 CAPLUS

CN Acetamide, N-[3-[4-[4-[[(4-methylphenyl)sulfonyl]amino]butyl]-1-piperazinyl]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

## ● HCl

RN 740873-78-3 CAPLUS

CN Cyclohexanemethanesulfonamide, N-[4-[4-[3-(dimethylamino)phenyl]-1-piperazinyl]butyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$N - (CH_2)_4 - NH - S - CH_2$$

$$Me_2N$$

HCl

RN 740873-79-4 CAPLUS

CN Cyclohexanemethanesulfonamide, N-[4-[4-(2-pyridinyl)-1-piperazinyl]butyl]-, monohydrochloride (9CI) (CA INDEX NAME)

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HC1

RN 740873-82-9 CAPLUS

CN Acetamide, N-[3-[4-[4-[[(cyclohexylmethyl)sulfonyl]amino]butyl]-1-piperazinyl]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

#### 10/768579

RN 740872-82-6 CAPLUS

CN Benzenesulfonamide, N-[4-[4-(3-aminophenyl)-1-piperazinyl]butyl]-4-methyl-(9CI) (CA INDEX NAME)

RN 740873-04-5 CAPLUS

CN Cyclohexanemethanesulfonamide, N-[4-[4-(3-nitrophenyl)-1-piperazinyl]butyl]- (9CI) (CA INDEX NAME)

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RN 740873-05-6 CAPLUS

CN Cyclohexanemethanesulfonamide, N-[4-[4-(3-aminophenyl)-1-piperazinyl]butyl]- (9CI) (CA INDEX NAME)

RN 740873-06-7 CAPLUS

CN Acetamide, N-[3-[4-[4-[(cyclohexylmethyl)sulfonyl]amino]butyl]-1-piperazinyl]phenyl]- (9CI) (CA INDEX NAME)

N— (CH<sub>2</sub>) 
$$_4$$
 – NH–  $_5$  – CH<sub>2</sub>

ACNH

RN 740873-10-3 CAPLUS

CN 2-Propanesulfonamide, N-[4-[4-(3-nitrophenyl)-1-piperazinyl]butyl]- (9CI) (CA INDEX NAME)

RN 740873-11-4 CAPLUS

CN 2-Propanesulfonamide, N-[4-[4-(3-aminophenyl)-1-piperazinyl]butyl]- (9CI) (CA INDEX NAME)

RN 740873-14-7 CAPLUS

CN 1-Propanesulfonamide, N-[4-[4-(3-aminophenyl)-1-piperazinyl]butyl]-2-methyl- (9CI) (CA INDEX NAME)

$$(CH_2)_4 - NH - S - Bu - i$$

RN 740873-23-8 CAPLUS

CN Cyclohexanemethanesulfonamide, N-methyl-N-[4-[4-(3-nitrophenyl)-1-piperazinyl]butyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me O} \\ & \parallel \\ & \parallel \\ & \text{O} \\ \text{N} & \text{CH}_2) \text{ 4-N-S-CH}_2 \\ \\ & \text{O} \\ \end{array}$$

RN 740873-24-9 CAPLUS

CN Cyclohexanemethanesulfonamide, N-[4-[4-(3-aminophenyl)-1-piperazinyl]butyl]-N-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me O} \\ & \parallel \\ \\ & \parallel \\ \\$$

RN 740873-27-2 CAPLUS

CN 1-Propanesulfonamide, N,2-dimethyl-N-[4-[4-(3-nitrophenyl)-1-piperazinyl]butyl]- (9CI) (CA INDEX NAME)

$$O_2N$$

$$O = S - Bu - i$$

$$CH_2)_4 - N - Me$$

RN 740873-28-3 CAPLUS

CN 1-Propanesulfonamide, N-[4-[4-(3-aminophenyl)-1-piperazinyl]butyl]-N,2-dimethyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ &$$

RN 740873-53-4 CAPLUS

CN Benzenesulfonamide, 4-fluoro-N-[4-[4-(3-nitrophenyl)-1-piperazinyl]butyl]-(9CI) (CA INDEX NAME)

RN 740873-54-5 CAPLUS

CN Benzenesulfonamide, N-[4-[4-(3-aminophenyl)-1-piperazinyl]butyl]-4-fluoro-(9CI) (CA INDEX NAME)

IT 740872-81-5P, 4-Methyl-N-[4-[4-(3-nitrophenyl)piperazin-1-yl]butyl]benzenesulfonamide dihydrochloride

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of arylpiperazinyl sulfonamides as 5-HT, in particular 5-HT1, receptor agonists and antagonists for treating anxiety and related disorders)

RN 740872-81-5 CAPLUS

CN Benzenesulfonamide, 4-methyl-N-[4-[4-(3-nitrophenyl)-1-piperazinyl]butyl]-, dihydrochloride (9CI) (CA INDEX NAME)

$$O_2N \longrightarrow N \longrightarrow (CH_2)_4 - NH - S \longrightarrow O$$

#### ●2 HC1

IT 740873-17-0, Cyclohexanesulfonic acid [4-[4-(3aminophenyl)piperazin-1-yl]butyl]amide

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of arylpiperazinyl sulfonamides as 5-HT, in particular 5-HT1, receptor agonists and antagonists for treating anxiety and related disorders)

RN 740873-17-0 CAPLUS

CN Cyclohexanesulfonamide, N-[4-[4-(3-aminophenyl)-1-piperazinyl]butyl](9CI) (CA INDEX NAME)

L3 ANSWER 19 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:444494 CAPLUS

- DN 137:28321
- TI Use of certain isoquinolinesulfonyl compounds for the treatment of glaucoma and ocular ischemia
- IN Hellberg, Mark R.; Kapin, Michael A.; Desantis, Louis M., Jr.
- PA Alcon Laboratories, Inc., USA
- SO U.S., 11 pp., Cont.-in-part of U.S. Ser. No. 77,575. CODEN: USXXAM
- DT Patent
- LA English
- FAN.CNT 2

PATENT NO. KIND DATE APPLICATION NO.	DATE
TALENT NO. KIND DATE ATTENDATION NO.	
PI US 6403590 B1 20020611 US 2001-919301	20010731
WO 9723222 A1 19970703 WO 1996-US20197	19961220
W: AU, CA, CN, JP, KR, MX, US	
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU,	MC, NL, PT, SE
US 6271224 B1 20010807 US 1999-77575	19990119
PRAI US 1995-9351P P 19951221	
WO 1996-US20197 W 19961220	
US 1999-77575 A2 19990119	

- OS MARPAT 137:28321
- AB Isoquinolinesulfonyl compds. are used in ophthalmic compns. to treat glaucoma or other ischemic-borne ocular disorders, e.g. retinopathies or optic neuropathies. These compds. vasodilate ocular blood vessels, lower IOP and prevent or reduce the progression of visual field loss. Prepn. and testing of 1-(5-isoquinolinesulfonyl)-2,5-dimethylpiperazine are described.
- IT 192712-45-1
  - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (isoquinolinesulfonyl compds. for treatment of glaucoma and ocular ischemia)
- RN 192712-45-1 CAPLUS
- CN 5-Isoquinolinesulfonamide, N-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

# RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 29 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN
L3
      2000:688218 CAPLUS
AN
DN
      133:252456
      Preparation of N-[2-piperazino(or piperidino)ethyl] benzenesulfonamides
ΤI
      and thiophenesulfonamides as 5-HT7 receptor antagonists
IN
      Lovell, Peter John
      Smithkline Beecham Plc, UK
PA
      PCT Int. Appl., 26 pp.
so
      CODEN: PIXXD2
DT
      Patent
LA
      English
FAN.CNT 1
                               KIND
                                                        APPLICATION NO.
                                                                                    DATE
      PATENT NO.
                                         DATE
                                ____
                                         20000928
                                                       WO 2000-EP2267
                                                                                      20000314
      WO 2000056712
                                A1
PT
                AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
                 CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID,
                 IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV,
           MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
      EP 1163221
                                 A1
                                      20011219 EP 2000-916945
                                                                                      20000314
               AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                 IE, SI, LT, LV, FI, RO
                                         20031209
                                                       US 2001-937043
                                                                                      20010920
      US 6660751
                                 В1
PRAI GB 1999-6624
                                         19990323
                                 Α
      WO 2000-EP2267
                                 W
                                         20000314
OS
      MARPAT 133:252456
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GI

$$\begin{bmatrix} R1 \end{bmatrix}_{m} \underbrace{\begin{smallmatrix} 02 \\ S \\ N \\ R2 \end{smallmatrix}}_{R2} \underbrace{\begin{smallmatrix} N \\ N \\ N \\ I \end{bmatrix}}_{R}$$

The title compds. [I; Q = Ph, thienyl; R1 = halo, OH, alkyl, etc.; m = 0-3; R2 = alkyl; X = N, C, CH; D = a single bond; CO, O, CH2 subject to the proviso that when X = N then D is not O; P = Ph, naphthyl, 5-6 membered heteroaryl contg. 1-3 heteroatoms selected from O, N and S, etc.; R3 = (un)substituted alkyl; n = 0-3] having 5-HT7 receptor antagonist activity, and therefore useful in the treatment of CNS and other disorders, were prepd. E.g., a multi-step synthesis of benzenesulfonamide II was given. All compds. I tested had a pKi of 6.2-9.0 against 5-HT7 receptor binding.

IT 295790-23-7P 295790-24-8P 295790-25-9P 295790-26-0P 295790-32-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of N-[2-piperazino(or piperidino)ethyl] benzenesulfonamides and thiophenesulfonamides as 5-HT7 receptor antagonists)

RN 295790-23-7 CAPLUS

CN Benzenesulfonamide, N-[2-[4-(2-chlorophenyl)-1-piperazinyl]ethyl]-N,3-dimethyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} & \text{O} \\ & & \text{II} \\ & & \text{N} \end{array}$$

RN 295790-24-8 CAPLUS

CN Benzenesulfonamide, N, 3-dimethyl-N-[2-[4-[3-(trifluoromethyl)phenyl]-1-

piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

RN 295790-25-9 CAPLUS

CN Benzenesulfonamide, N,3-dimethyl-N-[2-[4-(2-pyrimidinyl)-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & N - CH_2 - CH_2 - N - S \\ \hline \\ N & O \\ \end{array}$$

RN 295790-26-0 CAPLUS

CN Benzenesulfonamide, N-[2-[4-(5-ethyl-2-pyrimidinyl)-1-piperazinyl]ethyl]-N,3-dimethyl-(9CI) (CA INDEX NAME)

$$N - CH_2 - CH_2 - N - S$$

$$N - CH_2 - CH_2 - N - S$$

$$N - CH_2 - CH_2 - N - S$$

$$N - CH_2 - CH_2 - N - S$$

$$N - CH_2 - CH_2 - N - S$$

RN 295790-32-8 CAPLUS

CN Benzenesulfonamide, 4-fluoro-N-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-N-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{OMe} & \text{N} & \text{CH}_2\text{-}\text{CH}_2\text{-}\text{N} - \text{S} \\ & \text{O} \\ & \text{O} \\ & \text{O} \\ \end{array}$$

IT 295790-51-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of N-[2-piperazino(or piperidino)ethyl] benzenesulfonamides and thiophenesulfonamides as 5-HT7 receptor antagonists)

RN 295790-51-1 CAPLUS

CN Benzenesulfonamide, N,3-dimethyl-N-[2-[4-(phenylmethyl)-1-

piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

# RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 34 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1999:147946 CAPLUS

DN 130:196670

TI Arylcarbamoylalkylpiperazines and -piperidines as CCR-3-receptor antagonists

IN Gong, Leyi; Kertesz, Denis John; Smith, David Bernard; Talamas, Francisco Xavier; Wilhelm, Robert Stephen

PA F. Hoffmann-La Roche A.-G., Switz.

SO Ger. Offen., 60 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 2 PATENT NO.			KIND DATE		APPLICATION NO.					DATE								
PI						<b>A1</b>						1998-1					980	
		9033				A2			90324	E	•	1998-1	1149	11		1,5	9980	RIO
		9033				A3			00524									
	EP	9033				B1	D.22		50104	CD (						<b>a</b> =	va	D.M.
		R:		-						GB, C	έK	, IT,	, נול	TO,	ΝL,	SE,	MC,	PT,
	110	2212				LV,				27.5	,	1000	2212			10	2000	011
	NZ	3313	19			A AA		2000	00327 90218	N Z	<u>.</u>	1998-3 1998-2	3313.	13		13	9980: 9980:	
	CA	2243	167			AA A1						1998-1					9980	
			167			B1			L0316 L1101	E	•	1990-	1760			13	9900	014
		9803				A			90219	M		1998-3	710			1 (	980	017
		2330				A A1			90428			1998-3					9980	
			800			A1			90420		_	1998-8		-			9980	
		7440				B2			20214	A	,	1990-0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	J		13	9900	010
			826			A1			90305	וים	>	1998-	1050	4		10	980	818
		1211	. — .			A			90324			1998-					9980	
		1107				В			30430	O.	•	1330 .	L				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	010
			7872						90602	.TI	Ь	1998-2	2119	1 8		10	9980	R18
			367			B2			00228	٠.	-							
		7011				A1			00125	SC	3	1998-3	3133			19	9980	818
			179						00328			1998-3					9980	
		1304				B1			10308	-		1998-1					9980	
			2667					-	11230			2003-					0031	
		6984				B2			50110									
PRAI									70818									
	US	1998	-134	013		<b>A</b> 3		1998	30814									
	US	2001	-965	068		A3			10926									
os	MAI	RPAT	130:	1966	70													

Page 162

GΙ

ArFECR<sup>3</sup>R<sup>4</sup> (CHR)<sub>m</sub>-T 
$$U-QAr^1$$
 (CH<sub>2</sub>)<sub>n</sub>

AB Title compds. I [Ar, Ar1 = aryl, heteroaryl; E = (un)substituted CONH, SO2NH, NHCONH, NHSO2NH, NHCSNH, NHCO, NHCO2, O2CNH, NHSO2; F = alkylene, alkenylene; R = H, alkyl; R1, R2 = H, alkyl; R3, R4 = H, (un)substituted alkyl, cycloalkyl, heterocyclic, CN; CR3R4 = carbocyclic, heterocyclic; RR3 = atoms required to form a carbocyclic or heterocyclic ring; Q = (un)substituted alkylene, heteroalkylene; one of T an U = N, the other is N or CH; n = 0-2] were prepd. for use as CCR-3 receptor antagonists, useful in treating asthma in particular. Thus, N-[(1S)-[4-(3,4-dichlorobenzyl)piperazin-1-ylmethyl]-2-methylpropyl]-4-methylbenzamide.2HCl was prepd. from 1-(3,4-dichlorobenzyl)piperazine and BOC-L-valine in 4 steps. This compd. had an IC50 for CCR-3 receptor binding of 0.24 .mu.M.

IT 220772-02-1P 220772-03-2P 220772-06-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of arylcarbamoylalkylpiperazines and -piperidines as CCR-3-receptor antagonists)

RN 220772-02-1 CAPLUS

CN Benzenesulfonamide, N-[(1R)-1-[[4-[(3,4-dichlorophenyl)methyl]-1-piperazinyl]methyl]-2-methylpropyl]-4-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 220772-03-2 CAPLUS

CN Benzenesulfonamide, 4-chloro-N-[1-[[4-[(4-chlorophenyl)methyl]-1-piperazinyl]methyl]-2-methylpropyl]- (9CI) (CA INDEX NAME)

RN 220772-06-5 CAPLUS

CN Benzenesulfonamide, N-[1-[[4-[(4-chlorophenyl)methyl]-1-piperazinyl]methyl]-2-methylpropyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)

IT 220772-04-3P 220772-05-4P 220772-07-6P

220772-08-7P 220772-09-8P 220772-10-1P

220772-11-2P 220772-12-3P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of arylcarbamoylalkylpiperazines and -piperidines as CCR-3-receptor antagonists)

RN 220772-04-3 CAPLUS

CN Benzenesulfonamide, N-[(1R)-1-[[4-[(3,4-dichlorophenyl)methyl]-1-piperazinyl]methyl]-2-methylpropyl]-4-nitro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 220772-05-4 CAPLUS

CN 2-Thiophenesulfonamide, N-[(1R)-1-[[4-[(4-chlorophenyl)methyl]-1-piperazinyl]methyl]-2-methylpropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

#### 10/768579

RN 220772-07-6 CAPLUS

CN Benzenesulfonamide, 2,4-dichloro-N-[1-[[4-[(3,4-dichlorophenyl)methyl]-1-piperazinyl]methyl]-3-methylbutyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & i-Bu & 0 \\ & & & | & & | \\ N-CH_2-CH-NH-S & & & & \\ C1 & & & & & \\ C1 & & & & & \\ \end{array}$$

RN 220772-08-7 CAPLUS

CN Benzenesulfonamide, 3-bromo-N-[1-[[4-[(3,4-dichlorophenyl)methyl]-1-piperazinyl]methyl]-3-methylbutyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & i-Bu & O \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

RN 220772-09-8 CAPLUS

CN Benzenesulfonamide, N-[(1R)-1-[[4-[(4-chlorophenyl)methyl]-1-piperazinyl]methyl]-2-methylpropyl]-4-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 220772-10-1 CAPLUS

CN Benzenesulfonamide, 2-chloro-N-[(1R)-1-[[4-[(4-chlorophenyl)methyl]-1-piperazinyl]methyl]-2-methylpropyl]-4-fluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 220772-11-2 CAPLUS

CN Benzenesulfonamide, N-[(1R)-1-[[4-[(4-chlorophenyl)methyl]-1-piperazinyl]methyl]-2-methylpropyl]-2-nitro-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)

#### Absolute stereochemistry.

RN 220772-12-3 CAPLUS

CN Benzenesulfonamide, N-[1-[[4-[(4-chlorophenyl)methyl]-1-piperazinyl]methyl]-2-methylpropyl]-3,4-dimethoxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{C1} & \text{OMe} \\ & \text{i-Pr} & \text{O} \\ & \text{N---} \text{CH}_2\text{---} \text{CH---} \text{NH---} \text{S} \\ & \text{O} \\ & \text{O} \end{array}$$

- L3 ANSWER 40 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1997:542438 CAPLUS
- DN 127:248014
- TI Preparation of piperidinylpropylarenesulfonamide derivatives as 5HT7 receptor antagonists.
- IN Forbes, Ian Thomson
- PA Smithkline Beecham PLC, UK; Forbes, Ian Thomson
- SO PCT Int. Appl., 35 pp. CODEN: PIXXD2
- DT Patent
- LA English

FAN.CNT 1

 W: JP, US

RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE 883613 A1 19981216 EP 1997-902289 19970127

EP 883613 A1 19981216 EP 1997-R: BE, CH, DE, ES, FR, GB, IT, LI, NL

JP 2000504677 T2 20000418 JP 1997-528118 19970127

PRAI GB 1996-2679 A 19960209

GB 1996-13263 A 19960625 WO 1997-EP446 W 19970127

OS MARPAT 127:248014

AB ArSO2NR1(CR2R3)nNR4R5 [Ar = (substituted) mono- or bicyclic (hetero)aryl; R1 = alkyl; R2, R3 = H, alkyl; R4, R5 = H, alkyl, aryl, aralkyl; NR4R5 = (substituted) 5-8 membered heterocyclyl; n = 2-4], were prepd. Thus, 1-methyl-3-(3-methylpiperidin-3-yl)propylamine and Et3N were treated with 1-naphthalenesulfonyl chloride in CH2Cl2 to give 48% N-[1-methyl-3-(3-methylpiperidin-1-yl)propyl]-1-naphthalenesulfonamide. The latter in DMF was treated with NaH and MeI in DMF to give 68% N-methyl-N-[1-methyl-3-(3-methylpiperidin-1-yl)propyl]-1-naphthalenesulfonamide, isolated as the hydrochloride. Title compds. showed pKi = <5.2-7.8 for displacing [3H]-carboxamidotryptamine from 5HT7 receptor clones.

IT 195199-77-0P 195199-78-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of piperidinylpropylarenesulfonamide derivs. as 5HT7 receptor antagonists)

RN 195199-77-0 CAPLUS

CN 1-Naphthalenesulfonamide, N-methyl-N-[1-methyl-3-(4-phenyl-1-piperazinyl)propyl]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 195199-78-1 CAPLUS

CN 2-Thiophenesulfonamide, 4,5-dibromo-N-methyl-N-[1-methyl-3-(4-phenyl-1-piperazinyl)propyl]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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L3 ANSWER 41 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN
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AN 1997:526102 CAPLUS

DN 127:220471

TI Preparation of nitro compounds for treatment of angina pectoris and for prevention of restenosis after percutaneous transluminal coronary angioplasty

IN Uchida, Yasuyoshi; Koga, Hiroshi; Ko, Naoki

PA Chugai Pharmaceutical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 30 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT	NO. KI	ND DATE	APP	LICATION	NO. DATE	
						•
PI JP 092 PRAI JP 199		2 19970 19960		1996-4397	6 19960124	Ŀ

OS MARPAT 127:220471

AB R1AR2GR3ONO2 [R1 = (un) substituted Ph, naphthyl, anthryl, other arom. hydrocarbyl, (un) substituted pyridyl, quinolyl, isoquinolyl, carbazolyl, indolyl, other heterocyclyl; A = SO2, O, S, (N-substituted) sulfonamido, amido, thioamido, cyanamido; R2 = C1-10 hydrocarbyl; G = SO2, O, S, (N-substituted) sulfonamido, amido, thioamido, cyanamido, amino, cyclic amino; R3 = (un)substituted C1-18 hydrocarbyl (linked via hetero atom)] or their pharmaceutically acceptable salts are prepd. Mesylation of 3.0 g 5-chloro-N-(6-hydroxyhexyl)-1-naphthalenesulfonamide in CH2Cl2 in the presence of 4-dimethylaminopyridine at room temp. for 2.5 h gave 3.54 g 5-chloro-N-(6-methanesulfonyloxyhexyl)-1-naphthalenesulfonamide, which (1.77 g) was treated with 1.01 mL 2-aminoethanol in THF at 70.degree. for 27 h to afford 920 mg 5-chloro-N-[6-(2-hydroxyethylamino)hexyl]-1naphthalenesulfonamide. The product (200 mg) was treated with urea, fuming HNO3, and Ac20 in CH2Cl2 at room temp. for 4 h to give 60 mg 5-chloro-N-[6-(2-nitroxyethylamino)hexyl]-1-naphthalenesulfonamide nitrate, which at 10-5 M inhibited 52% proliferation of rat vascular smooth muscle cells (A7r5 cells).

1T 195003-63-5P, N-[3-[4-[4-(Hydroxymethyl)benzyl]piperazin-1yl]propyl]benzenesulfonamide 195003-65-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of antianginal nitro compds.)

RN 195003-63-5 CAPLUS

CN Benzenesulfonamide, N-[3-[4-[[4-(hydroxymethyl)phenyl]methyl]-1-piperazinyl]propyl]- (9CI) (CA INDEX NAME)

RN 195003-65-7 CAPLUS

CN Benzenesulfonamide, N-[6-[4-[[4-(hydroxymethyl)phenyl]methyl]-1-piperazinyl]hexyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O & N - CH_2 \\
Ph - S - NH - (CH_2) & O \\
O & CH_2 - OH
\end{array}$$

IT 195002-98-3P 195003-02-2P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of antianginal nitro compds.)

RN 195002-98-3 CAPLUS

CN Benzenesulfonamide, N-[3-[4-[(4-[(nitrooxy)methyl]phenyl]methyl]-1-piperazinyl]propyl]-, dihydrochloride (9CI) (CA INDEX NAME)

$$O_2N-O-CH_2$$

$$O_2N-O-CH_2$$

$$O_3-NH-S-Ph$$

$$O_1$$

$$O_2$$

$$O_3$$

$$O_4$$

$$O_4$$

$$O_5$$

$$O_7$$

$$O_8$$

#### •2 HCl

RN 195003-02-2 CAPLUS

CN Benzenesulfonamide, N-[6-[4-[(4-[(nitrooxy)methyl]phenyl]methyl]-1-piperazinyl]hexyl]-, dihydrochloride (9CI) (CA INDEX NAME)

$$O_2N-O-CH_2$$
 $O_2N-O-CH_2$ 
 $O_1$ 
 $O_2N-O-CH_2$ 
 $O_1$ 
 $O_2N-O-CH_2$ 
 $O_1$ 
 $O_2N-O-CH_2$ 
 $O_1$ 
 $O_2N-O-CH_2$ 
 $O_2N-O-CH_2$ 
 $O_1$ 
 $O_2N-O-CH_2$ 
 $O_2N-O-CH_2$ 
 $O_1$ 
 $O_2N-O-CH_2$ 
 $O_2N-O-CH_2$ 
 $O_2N-O-CH_2$ 
 $O_1$ 
 $O_2N-O-CH_2$ 
 $O_2N-O-CH_2$ 
 $O_2N-O-CH_2$ 
 $O_1$ 
 $O_2N-O-CH_2$ 
 $O_2N-O-C$ 

#### ●2 HCl

L3 ANSWER 42 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1997:503173 CAPLUS

DN 127:126664

TI Pharmaceutical compositions containing isoquinolinesulfonyl derivatives for the treatment of glaucoma and ocular ischemia

IN Kapin, Michael A.; Desantis, Louis M., Jr.

PA Alcon Laboratories, Inc., USA; Kapin, Michael A.; Desantis, Louis M., Jr.

SO PCT Int. Appl., 27 pp. CODEN: PIXXD2

DT Patent LA English FAN.CNT 2 DATE KIND APPLICATION NO. DATE PATENT NO. ---------\_\_\_\_\_ \_\_\_\_\_ 19970703 WO 1996-US20197 PΙ WO 9723222 A1 19961220 W: AU, CA, CN, JP, KR, MX, US RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE CA 1996-2240271 CA 2240271 AA 19970703 19961220 CA 2240271 С 20051213 AU 9714644 **A1** 19970717 AU 1997-14644 19961220 AU 720326 В2 20000525 EP 1996-945220 EP 868186 A1 19961220 19981007 EP 868186 В1 20050302 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI CN 1207680 19990210 CN 1996-199673 19961220 E 20050315 AT 1996-945220
ES 2238702 T3 20050901 ES 1996-945220
TW 534814 B 20030601 TW 1997-86101346
US 6271224 B1 20010807 US 1999-77575
HK 1015691 A1 20050520 HK 1999-100710
US 6403590 B1 20020611 US 2001-919301
US 1995-9351P P 19951221
WO 1996-US20197 W 19961220
US 1999-77575 A2
MARPAT 127:12666 19961220 19961220 19961220 19961220 19970204 19990119 19990227 20010731 PRAI US 1995-9351P OS AB Isoquinolinesulfonyl compds. (Markush structure given) are used in ophthalmic compns. to treat glaucoma or other ischemic-borne ocular disorders such as retinopathies or optic neuropathies. These compds. vasodilate ocular blood vessels, lower intraocular pressure and prevent or reduce the progression of visual field loss. Topical administration of 150.mu.g fasudil hydrochloride (I) to rabbits eyes decreased the intraocular pressure by 14.6% after 1 h. An eye drop contain I 1.5, benzalkonium chloride 0.01, and phosphate buffered saline q.s. 100%. IT 192712-45-1 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical compns. contg. isoquinolinesulfonyl derivs. for treatment of glaucoma and ocular ischemia) 192712-45-1 CAPLUS RN

CN 5-Isoquinolinesulfonamide, N-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl](9CI) (CA INDEX NAME)

L3 ANSWER 53 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:902630 CAPLUS

DN 123:313770

TI Preparation of piperidino and piperazino 5-HT2 receptor antagonists and blood platelet aggregation inhibitors

IN Aoki, Tsuyoshi; Takahashi, Atsuo; Sato, Hiroyasu; Shimanuki, Eiji; Gengyou, Kaoru; Nishimata, Toyoki; Ishigami, Sachiko; Yamada, Shin-ichi; Yamaguchi, Takahiro; et al.

PA Toa Eiyo Ltd., Japan

SO Eur. Pat. Appl., 123 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN. CNT 2

C MIA . (						
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
	~~~~~~					r
ΡI	EP 661266	A1	19950705	EP 1994-120698	19941227	(
	R: BE, CH, DE,	ES, FR	, GB, IT, LI	, LU, NL		
	JP 07242629	A2	19950919	JP 1994-336707	19941226	
PRAI	JP 1993-346805	Α	19931227			
os	MARPAT 123:313770					
GT						

$$R^{1}$$
 $D$ 
 $APT (CH2)n - N$ 
 $Q-B$ 
 $R^{5}$ 
 $I$ 

The title compds. [I; A = CH2, CO, sulfonyl; B, T = direct bond, CH2, CO, CH(OH), C(:NH); D = CH, N, N.fwdarw.O; P = N, N.fwdarw.O; Q = CH, N; Rl, R2 = H, OH, (un)branched alkyl, alkenyl, (un)substituted aralkyl, acyl, (un)substituted NH2, etc.; R3 = H, OH, (un)branched alkyl or alkoxy; R4, R5 = H, OH, halogen, (un)branched alkyl, alkenyl, alkoxy, alkylthio, (un)substituted NH2, SH, etc.; n = 1-6], useful as 5-HT2 receptor antagonists and blood platelet aggregation inhibitors, are prepd. Thus, 4-acetylamino-N-[2-[4-(4-fluorobenzoyl)piperidino]ethyl]-N-(3-methoxyphenyl)benzamide fumarate, m.p. 215-222.degree. (decompn.), prepd. by the reaction of the free base with fumaric acid, demonstrated a IC50 for platelet aggregation in rabbit-derived, platelet-rich plasma of .ltoreq.9.9 x 10-8 M, vs. 1.0-9.9 x 10-7 M for ketanserin.

IT 169945-97-5P 169946-03-6P 169946-57-0P 169946-58-1P 169946-59-2P 169947-91-5P 169948-06-5P 169948-07-6P 169948-08-7P 169948-40-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of piperidino and piperazino 5-HT2 receptor antagonists and blood platelet aggregation inhibitors)

RN 169945-97-5 CAPLUS

CN Benzenesulfonamide, N-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-4-methoxy- (9CI) (CA INDEX NAME)

RN 169946-03-6 CAPLUS

CN Benzamide, N-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-N-[(4-methoxyphenyl)sulfonyl]- (9CI) (CA INDEX NAME)

RN 169946-57-0 CAPLUS

CN Benzenesulfonamide, N-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-4-methoxy-N-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 169946-58-1 CAPLUS

CN Benzenesulfonamide, 4-fluoro-N-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-N-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 169946-59-2 CAPLUS

CN Benzenesulfonamide, N-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-N-(2-methoxyphenyl)-3-nitro-(9CI) (CA INDEX NAME)

RN 169947-91-5 CAPLUS

CN Benzamide, N-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-N-[(4-methoxyphenyl)sulfonyl]-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 169946-03-6

CMF C27 H30 F N3 O4 S

$$\begin{array}{c|c} & & & & \\ & & & \\ Ph-C & O \\ & & & \\ N &$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 169948-06-5 CAPLUS

CN Benzenesulfonamide, N-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-4-methoxy-N-(2-methoxyphenyl)-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 169946-57-0 CMF C27 H32 F N3 O4 S

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 169948-07-6 CAPLUS

CN Benzenesulfonamide, 4-fluoro-N-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-N-(2-methoxyphenyl)-, ethanedioate (1:1) (9CI) (CA

## 10/768579

INDEX NAME)

CM 1

CRN 169946-58-1

CMF C26 H29 F2 N3 O3 S

CM 2

CRN 144-62-7

CMF C2 H2 O4

RN 169948-08-7 CAPLUS

CN Benzenesulfonamide, N-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-N-(2-methoxyphenyl)-3-nitro-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 169946-59-2

CMF C26 H29 F N4 O5 S

CM 2

CRN 144-62-7 CMF C2 H2 O4 10/768579

RN 169948-40-7 CAPLUS

CN Benzenesulfonamide, N-[3-[4-(4-fluorophenyl)-1-piperazinyl]propyl]-4-methoxy-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 169945-97-5

CMF C20 H26 F N3 O3 S

CM 2

CRN 144-62-7 CMF C2 H2 O4

L3 ANSWER 60 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1993:641393 CAPLUS

DN 119:241393

TI Isoquinoline sulfonamide derivatives for anti-ulcer agents

IN Hidaka, Hiroyoshi; Ishikawa, Tomohiko

PA Japan

SO U.S., 8 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
		<del>-</del>			
PI	US 5244895	Α	19930914	US 1992-883344	19920515
PRAI	JP 1991-8580	Α	19910515		
OS	MARPAT 119.241393				

GI

$$CH_2$$
  $OR^4$   $CH_2$   $OR^4$   $C(R^2)R^3N$   $A$ 

AB The anti-ulcer agents of the invention are I [R1 = H, (substituted) C1-2 alkyl; R2, R3 = H or together form oxo; R4 = H, Me, isoquinoline sulfonyl; n = 2, 3; A = NR5 CHR5 (R5 = (substituted) Ph, (substituted) benzyloxycarbonyl] or a physiol. allowable acid addn. salt thereof. Twelve specific I are claimed; and prepn. of 3 I is described. Thus, N-[N,O-bis(5-isoquinoline sulfonyl)-N-methyl-tyrosyl]-4-phenylpiperazine (II) (prepn. given) and 15 other I were tested in an anti-gastric juice secretion test and an anti-aspirin ulcer test. Tablet and injection formulations of II phosphate are included.

Ι

IT 130962-59-3 130962-61-7 130962-71-9 130962-72-0

RL: BIOL (Biological study)
 (ulcer inhibitor)

RN 130962-59-3 CAPLUS

CN 5-Isoquinolinesulfonic acid, 4-[2-[(5-isoquinolinylsulfonyl)methylamino]-3-(4-phenyl-1-piperazinyl)propyl]phenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 130962-61-7 CAPLUS

CN 5-Isoquinolinesulfonamide, N-[1-[(4-hydroxyphenyl)methyl]-2-(4-phenyl-1-piperazinyl)ethyl]- (9CI) (CA INDEX NAME)

RN 130962-71-9 CAPLUS

CN 5-Isoquinolinesulfonamide, N-[2-[4-(3-chlorophenyl)-1-piperazinyl]-1-[(4-hydroxyphenyl)methyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 130962-72-0 CAPLUS

CN 5-Isoquinolinesulfonic acid, 4-[3-[4-(4-fluorophenyl)-1-piperazinyl]-2-[(5-isoquinolinylsulfonyl)amino]propyl]phenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

ANSWER 63 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN L3 AN 1993:80951 CAPLUS 118:80951 DN Preparation of sulfonamide derivatives containing heterocyclyl groups ΤI IN Kajihara, Akiro; Asano, Toshio PA Asahi Kasei Kogyo K. K., Japan SO PCT Int. Appl., 42 pp. CODEN: PIXXD2

DTPatent LΑ Japanese

FAN.CNT 1

rau.	PATENT NO.	•	KIND	DATE	APPLICATION NO.	DATE
ΡI	WO 9214712		A1	19920903	WO 1992-JP146	19920213
	W: CA	, NO, US				
	RW: AT	, BE, CH,	DE, DE	K, ES, FR,	GB, GR, IT, LU, MC, N	IL, SE
	JP 0500103	7	A2	19930108	JP 1991-261394	19910913
	CA 2089128		AA	19920814	CA 1992-2080128	19920213
	EP 525203		A1	19930203	EP 1992-904985	19920213
	R: AT	, BE, CH	DE, DE	K, ES, FR,	GB, IT, LI, LU, NL, S	E
	US 5326870		A	19940705	US 1992-927493	19920929
	NO 9203808		Α	19921211	NO 1992-3808	19920930
	NO 178066		В	19951009		
	NO 178066		С	19960117		
PRAI	JP 1991-19	761	Α	19910213		
	WO 1992-JP	146	W	19920213		
OS GI	MARPAT 118	:80951				

AΒ The title compds. [I; A = H, alkyl; E = alkyl, alkoxyalkyl, aryloxyalkyl, etc.; G = alkylene; Q1, Q2 = (CH2)2, (CH2)3; X = quinoline, isoquinoline, benzothiazole, 4-oxoquinazoline residue], useful as antiasthmatics, are prepd. 8-Chloro-5-quinolinesulfonic acid was refluxed with SOCl2 in DMF and the resultant sulfonyl chloride was treated with piperazine deriv. II and Et3N in CH2Cl2 at 20.degree. to give 72% sulfonamide III, which showed 82% inhibition of histamine-induced vasoconstriction at 0.1 mg/kg i.v. in guinea pigs.

IT 145708-53-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as antiasthmatic agent)

RN 145708-53-8 CAPLUS

CN 5-Quinolinesulfonamide, 8-chloro-N-[2-[4-[3-(3-pyridinyl)propyl]-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

- L3 ANSWER 67 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1991:632247 CAPLUS
- DN 115:232247
- TI Preparation of imidazole sulfonamides as antithrombotic agents
- IN Graeve, Rolf; Okyayuz-Baklouti, Ismahan; Seiffge, Dirk
- PA Hoechst A.-G., Germany

## 10/768579

SO	Ger. Offen., 39	pp.
	CODEN: GWXXBX	
DT	Patent	

LA German

FAN.	PATENT NO.		DATE	APPLICATION NO.	DATE
ΡI	DE 4004061		19910814	DE 1990-4004061	19900210
	EP 442348			EP 1991-101497	
	EP 442348				
			19960717		
	R: AT, BE, CH,	DE, DK	ES, FR, GI	B, GR, IT, LI, LU, NL,	SE
	AT 140452	E	19960815	AT 1991-101497	19910205
	ES 2090150	Т3	19961016	AT 1991-101497 ES 1991-101497 FI 1991-602	19910205
	FI 9100602	Α	19910811	FI 1991-602	19910207
	BR 9100520	A	19911029	BR 1991-520	19910207
	CA 2035988	AA	19910811	CA 1991-2035988	19910208
	NO 9100496	A		NO 1991-496	
	AU 9170848	A1	19910815	AU 1991-70848	19910208
	AU 634342	B2	19930218		
	ни 56549	A2	19910930	HU 1991-415	19910208
	ни 207997	В	19930728		
	ZA 9100948	Α	19911030	ZA 1991-948	19910208
	JP 04316561		19921106	JP 1991-60750	19910208
	JP 3026847	B2	20000327		
	US 5232922	Α		us 1991-652606	
	CN 1053919	Α	19910821	CN 1991-100969	19910209
	US 5356922	Α	19941018	US 1993-57887	19930507
PRAI	DE 1990-4004061	A	19900210		
	US 1991-652606	<b>A3</b>	19910208		
os	MARPAT 115:232247				
GI					

AB The title compds. [I; R1 = alkyl; R2,R3 = H, halo, alkyl; X = OH, NR4R5; R4 = H, (un)substituted alkyl; R5 = phenylalkyl, (un)substituted alkyl, etc.] were prepd. Thus, 1-methyl-2-imidazolesulfonyl chloride was condensed with 2-morpholinoethylamine to give title compd. II.HCl which gave 45% inhibition of laser-induced thromboses in rats at 10 mg/kg orally.

IT 137048-49-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as antithrombotic agent)

RN 137048-49-8 CAPLUS

CN 1H-Imidazole-4-sulfonamide, 1-methyl-N-[3-[4-(phenylmethyl)-1-piperazinyl]propyl]-, monohydrochloride (9CI) (CA INDEX NAME)

L3 ANSWER 74 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1990:98558 CAPLUS

DN 112:98558

TI Preparation and testing of N-[(arylsulfamido)alkyl]piperazines as cardiovascular agents

IN Tanabe, Sohei; Sato, Seiichi; Kyotani, Yoshinori; Ohta, Tomio; Uchida, Kasumi

PA Kowa Co., Ltd., Japan

SO Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

FAN. CNT I						
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
ΡI	EP 330065	A1	19890830	EP 1989-102586	19890215	
	EP 330065	В1	19931110			
	R: BE, CH, DE,	FR, GB	, IT, LI, NL	, SE		
	JP 01211567	A2	19890824	JP 1988-33949	19880218	
	JP 2556722	В2	19961120			
	US 4948892	A	19900814	US 1989-310684	19890215	
PRAI	JP 1988-33949	Α	19880218			
os	MARPAT 112:98558					
GI						

$$\begin{array}{c|c}
R^{1} & & \\
R^{2} & & \\
R^{3} & & \\
\end{array}$$

$$\begin{array}{c|c}
R^{6} & & \\
NR^{5} & & \\
R^{7} & & \\
\end{array}$$

AB The title compds. [I; R1-R3 = H, halo, alkyl, alkoxy; R4 = H, alkyl, (substituted) aralkyl; R5 = (substituted) aryl, aralkyl; R6, R7 = H, alkyl, alkoxy; n = 1-8], useful as cardiovascular agents, were prepd. Thus, 1-diphenylmethyl-4-(3-aminopropyl)piperazine and Et3N in CH2Cl2 were treated with PhSO2Cl with ice cooling to give the sulfonamide which, in DMF, was treated with NaH and PhCH2Cl to give piperazine II. I inhibited 3,4-diaminopyridine-induced contraction of dog coronary artery rings at 10-6M. I also inhibited ADP-induced aggregation of rabbit platelet-rich plasma.

IT 125393-61-5P 125393-62-6P 125393-63-7P 125393-64-8P 125393-75-1P 125433-03-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, as cardiovascular agent)

RN 125393-61-5 CAPLUS

CN Benzenesulfonamide, N-[3-[4-(phenylmethyl)-1-piperazinyl]propyl]-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

RN 125393-62-6 CAPLUS

CN Benzenesulfonamide, N-(phenylmethyl)-N-[3-[4-(phenylmethyl)-1piperazinyl]propyl]-, dihydrochloride (9CI) (CA INDEX NAME)

10/768579

$$O = S - Ph$$

$$(CH2)3 - N - CH2 - Ph$$

$$N$$

$$CH2 - Ph$$

●2 HCl

RN 125393-63-7 CAPLUS

CN Benzenesulfonamide, N-[3-[4-[(2,3,4-trimethoxyphenyl)methyl]-1-piperazinyl]propyl]-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

RN 125393-64-8 CAPLUS

CN Benzenesulfonamide, 4-chloro-N-[3-[4-[(2,3,4-trimethoxyphenyl)methyl]-1-piperazinyl]propyl]-, dihydrochloride (9CI) (CA INDEX NAME)

PAGE 2-A

●2 HCl

RN 125393-75-1 CAPLUS
CN Benzenesulfonamide, N-[3-[4-(2-pyridinyl)-1-piperazinyl]propyl]- (9CI)
(CA INDEX NAME)

125433-03-6 CAPLUS RN

Benzenesulfonamide, N-[6-[4-(2-methoxyphenyl)-1-piperazinyl]hexyl]-, dihydrochloride (9CI) (CA INDEX NAME) CN

## ●2 HCl

L3ANSWER 79 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1984:6557 CAPLUS

DN 100:6557

1-Phenylpiperazine derivatives having antiaggressive activity TI

IN Van Dalen-Van der Aa, Dirkje A.; Hulkenberg, Antonius

PA Duphar International Research B. V., Neth.

so Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DTPatent

LА English

FAN.CNT 1				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 89089	A1	19830921	EP 1983-200346	19830311
R: AT,	BE, CH, DE, I	FR, GB, IT,	LI, LU, NL, SE	
DK 8301016	A	19830913	DK 1983-1016	19830228
ES 520439	A1	19840416	ES 1983-520439	19830309
ZA 8301625	Α	19841031	ZA 1983-1625	19830309
AU 8312334	A1	19830915	AU 1983-12334	19830310
JP 58180478	A2	19831021	JP 1983-38414	19830310
PRAI NL 1982-103	2 A	19820312		
OS MARPAT 100:	6557			
GI				

Piperazines I (R = CF3, Cl; Z = CH2, CH2CH2, CHMeCH2, CH2CHMe; Zl = CH2, CO, SO2; Rl = H, Me, Et; Z2 = CO, SO2; R2 = NH2, alkylamino, dialkylamino, alkyl, cyclohexyl, cyclohexylmethyl, cyclohexyloxymethyl, benzyl, thenyl, pyridylmethyl, PhOCH2, PhSCH2, a 1-phenylcycloalkyl group, alkoxy, cycloalkyloxy, aralkoxy), useful as anti-aggressive agents (no data), were prepd. Thus, a mixt. of ClCH2CH2CONHSO2NH2, 1-[3-(trifluoromethyl)phenyl]piperazine, and Et3N in THF was refluxed to give I (R = CF3, Z = CH2CH2, Zl = CO, Rl = H, Z2 = SO2, R2 = NH2).

IT 88069-02-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

Ι

RN 88069-02-7 CAPLUS

CN Methanesulfonamide, N-[2-[4-[3-(trifluoromethyl)phenyl]-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

L3 ANSWER 83 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1969:87765 CAPLUS

DN 70:87765

TI Sedative, antiadrenergic, and hypotensive 2-substituted 2H-1,2,4-benzothiadiazin-3(4H)-one 1,1-dioxides

AU Hayao, Shin; Strycker, W. G.; Phillips, B. M.; Fujimori, H.; Vidrio, H.

CS Ther. Res. Div., Miles Lab., Inc., Elkhart, IN, USA

SO Journal of Medicinal Chemistry (1968), 11, 1246-8 CODEN: JMCMAR; ISSN: 0022-2623

DT Journal

LA English

GI For diagram(s), see printed CA Issue.

AB Treatment of o-nitro-benzenesulfonyl chloride with amines gave o-nitrobenzenesulfon-amides which were hydrogenated to o-aminobenzenesulfonamides which were cyclized by treatment with COCl2 in boiling PhCl to give 2-substituted 2H-1,2,4-benzothiadiazin-3(4H)-one 1,1-dioxides. Similarly, o-aminobenzenesulfonamide was cyclized with urea at 200.degree. or with COCl2 in boiling PhCl to give unsubstituted 2H-1,2,4-benzothiadiazin-3(4H)-one 1,1-dioxide, which was alkylated to give 2-substituted compds. An ice-cold soln. of 55 g. 1-(3-aminopropyl)-4-(m-fluorophenyl)piperazine in 150 ml. C6H6 and 100 ml. 20% NaOH soln. was treated with a soln. of 51.3 g. o-nitrobenzenesulfonyl chloride in 150 ml. C6H6 and the reaction mixt. stirred 2 hrs. at 25.degree., acidified with dil. HCl, and made basic with NH4OH to give

78.8 g 4-(m-fluorophenyl)-1-[3-(o-nitrobenzenesulfonamido)propyl]piperazin e (I) m. 111-12.degree. (C6H6-hexane). A soln. of 77.5 g. I in 210 ml. HOAc was hydrogenated over 5 g. 10% Pd/C to give 65.2 g. 1-[3-(o-amino-benzenesulfonamido)propyl]-4-(m-fluorophenyl)piperazine (II), m. 119-20.degree. (C6H6-hexane and MeOH). To an ice-cold soln. of 250 ml. PhCl contg. 50.9 g. COCl2 was added 44.4 g. II and the suspension refluxed 1 hr. to give 39.0 g. 2-[3-(4-m-fluorophenyl-1piperazinyl)propyl]-2H-1,2,4-benzothiadiazin-3(4H)-one 1,1-dioxide (III) hydrochloride, m. 257-8.degree. (decompn.) (MeOH- HCONMe2). The combined filtrates were concd. in vacuo and made basic with NH4OH to give 12.4 g. III, m. 148-9.degree. (MeOH). A soln. of 34.1 g. 6-chloro-2H-1,2,4benzothiadiazin-3(4H)-one 1,1-dioxide and 23.8 g. NaOMe in 200 ml. abs. EtOH and 100 ml. Me2SO was treated with 45.4 g. 1-(3-chloropropyl)-4phenylpiperazine dihydrochloride and refluxed 20 hrs. The soln. was filtered and the filtrate concd. in vacuo and worked up to give 14.0 g. 6-chloro-2-[3-(4-phenyl-1-piperazinyl)propyl]-2H-1,2,4-benzothiadiazin-3(4H)-one 1,1-dioxide hydrochloride (IV), m. 227-9.degree. (decompn.); free base m. 152-3.degree. (aq. MeOH-HCONMe2). V prepd. were (n, Q, m.p., and m.p. HCl salt given): 3, 4-phenyl-1-piperazinyl, 152-3.degree., 256-7.degree. (decompn.); 3, 4-(m-chlorophenyl)-1-piperazinyl, 149-50.degree., 224-6.degree. (decompn.); 3, 4-(m-trifluoromethylphenyl)-1piperazinyl, 158-9.degree., 262-3.degree. (decompn.); 3, 4-(p-fluorophenyl)-1-piperazinyl, 165-7.degree., 228-30.degree.; 3, 4-phenyl-1-piperidinyl, 161-2.degree., 219-20.degree. (decompn.); 4, 4-(m-chlorophenyl)-1-piperazinyl, 161-3.degree. (decompn.), -; 5, 4-phenyl-1-piperazinyl, 190.degree. (decompn.), -. In exptl. animals, the activity of 2-[3-(4-p-fluorophenyl-1-piperazinyl)propyl]-2H-1,2,4benzothiodiazin-3(4H)-one 1,1-dioxide hydrochloride (VI) as a psychosedative was comparable to that of chlorpromazine and 3-[3-(4-m-chlorophenyl-1-piperazinyl)propyl]-2,4(1H,3H)-quinazolinedione hydrochloride. Except for VI, the compds. showed weaker sedative and hypotensive activities than the corresponding 3-substituted 2,4(1H,3H)-quinazolinediones. Studies of the antiadrenergic and hypotensive activities indicated that the unsubstituted phenylpiperazine and phenylpiperidine derivs. had greater activity than compns. with substituents in the Ph ring. The compds. produced a small decrease in the water and electrolyte excretion in rats.

## IT 21920-27-4P 21920-28-5P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

RN 21920-27-4 CAPLUS

CN Benzenesulfonamide, N-[3-[4-(m-fluorophenyl)-1-piperazinyl]propyl]-o-nitro-(8CI) (CA INDEX NAME)

RN 21920-28-5 CAPLUS

CN Benzenesulfonamide, o-amino-N-[3-[4-(m-fluorophenyl)-1-piperazinyl]propyl]-(8CI) (CA INDEX NAME)

L3 ANSWER 84 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1967:10968 CAPLUS

DN 66:10968

TI 2H-1,2,4-Benzothiadiazine-3(4H)-one 1,1-dioxide derivatives

IN Hayao, Shin

PA Miles Laboratories, Inc.

SO U.S., 6 pp.

CODEN: USXXAM

DT Patent LA English FAN.CNT 1

PATENT NO. DATE APPLICATION NO. KIND DATE \_\_\_\_\_ -----PΙ US 3267096 19660816 US 19650224

GI For diagram(s), see printed CA Issue.

The title compds. are useful as central as central nervous system AB depressants, antiinflammatory agents, and antihypertensive agents and were prepd. according to the given scheme (n = 3 to 5 and X is H F, Cl, or F3C). Thus, to an ice cold soln. of 43.8 1-(3-aminopropyl)-4phenylpiperazine in 100 ml. C6H6 and 100 ml. 20% NaOH was added with vigorous stirring a soln. of 44.3 g. o-O2NC6H4SO2Cl in 100 ml. C6H6. The brown cloudy soln. was stirred an hr. and acidified with dil. HCl soln. to give a gummy mixt., which was made basic with NH4OH to give a light yellow solid. After filtration, the solid was washed with H2O and Et2O and dried at 50.degree. to give 98% N-[3-(4-phenyl-1-piperazinyl)-propyl]-2nitrobenzenesulfonamide (I), m. 175.degree. (softens at 135.degree.); recrystd. product m. 138-9.degree. [aq. MeOH-HCONMe2 (DMF)], yield 24.9 g. A soln. of 23.9 g. I in 200 ml. HOAc was reduced over 5 g. freshly prepd. 5% Pd-C with shaking overnight. The mixt. was filtered, the solvent removed, the residual sirup cooled in an ice-H2O bath, and basified with concd. NH4OH soln., and the gracy oil taken into CHCl3-Et2O and dried over MgSO4. A satd. soln. of HCl in iso-PrOH, (200 ml.) was added and the product isolated (24.9 g.) was the HCl salt of 2-amino-N-[3-(4-phenyl-1piperazinyl)propyl]benzenesulfonamide, m. 226-8.degree.; the free base (II), m. 117-18.degree.. A slow stream of COCl2 was bubbled 60 min. into a boiling soln. of 31.3 g. II in 250 ml. ClPh, the mixt. cooled, and the solid product collected, washed with EtOAc-Et2O and H2O, and air-dried to give 38.2 g. product, m. 226-32.degree.. The product was titurated with aq. NH4OH to yield 35.2 q. 2-[3-4(-phenyl-1-piperazinyl)propyl]-2H-1,2,4benzothiazin-3(4H)-one 1,1-dioxide (III), m. 151-4.degree. (aq. Me2CO). III was dissolved in hot MeOH satd. with HCl to give 26.6 g. III.HCl.-MeOH, m. 256-7.degree.. By a similar sequence of reactions, 76.1 g. 2-nitro-N-[3-(4-m-chlorophenyl-1-piperazinyl)propyl]benzenesulfonamide gave 75.8 g. 2-amino-N-[3-(4-m-chlorophenyl-1piperazinyl)propyl]benzenesulfonamide-HCl.MeOH (IV), m. 155-6.degree. (decompn.) (methanolic HCl-EtOAc). The HCl salt was suspended in H2O, aq. NH4OH added, the orange-yellow gum extd. with CHCl3 to yield 54.8 g. of the free base of IV, m. 105-7.degree.. Reaction with COCl2 in ClPh gave 47.4 g. 2-[3-(4-m-chlorophenyl-1-piperazinyl)propyl]-2H-1,2,4-benzothiazin-3(4H)-one 1,1-dioxide-HCl (V), m. 224-6.degree. (aq. MeOH-DMF). The free base of V (9.5 g.), m. 149-50.degree., was isolated from the filtrate. Likewise, 44 g. 1-m-chlorophenyl-4-(4-aminobutyl)piperazine was converted to 2-nitro-N-[4-m-chlorophenyl-1-piperazinyl)butyl]benzene sulfonamide. Redn. yielded 67.6 g. of the HCl salt of 2-amino-N-[4-(4-m-chlorophenyl-1piperazinyl)butyl]benzenesulfonamide which is converted to the free base on treatment with aq. NH4OH. The free base (51.4 g.) was allowed to react with COC12 to give 44.9 g. 2-[4-(4-m-chlorophenyl-1-piperazinyl)butyl]-2H-1,2,4-benzothiazin-3(4H)-one 1,1-dioxide-HCl (VI), m. 210-16.degree. (decompn.), which on treatment with aq. NH4OH yielded 29.1 g. the free base of VI, m. 133-4.degree., and this base was converted to 33.1 g. of the maleic acid salt, m. 161-3.degree. (decompn.) (EtOAc). The reaction of COC12 in ClPh with 76 g. 2-amino-N-[3-(4-m-trifluoromethylphenyl-1piperazinyl)propyl]benzenesulfonamide gave a product which was dissolved in Et2O and treated with maleic acid to give 91.7 g., m. 173-83.degree. (decompn.), of a crude maleate. It was converted to the free base to give

45 q. 2-[3-(4-m-trifluoro-methylphenyl-1-piperazinyl)propyl]-2H-1,2,4benzothiadiazin-3(4H)-one 1,1-dioxide (VII), m. 141-53.degree. (aq. MeOH). The VII obtained and maleic acid in MeOH gave 28.4 g. VII.C4H4O4, m. 184-5.degree. (MeOH-Et2O), and was converted to 10.7 g. VII.HCl, m. 262-3.degree. (decompn.). 1-(Aminopropyl)-4-phenylpiperidine (40.1 g.) was converted to 59.4 g. 2-nitro-N-[3-(4-phenyl-1piperidinyl)propyl]benzenesulfonamide (VIII), m. 113-14.degree. (aq. Redn. of the nitro group in VIII to an amino group, followed by the treatment with COC12 in C1C6H5 gave 20.8 g. 2-[3-(4-phenyl-1piperidinyl)propyl]-2H-1,2,4-benzothiadiazin-3(4H)-one 1,1-dioxide-HCl.MeOH (IX), m. 219-20.degree. (aq. MeOH). Addn. of aq. NH4OH to the filtrates of the crystn. liquors gave 16 g. of the free base of IX, m. 161-2.degree. (aq. Me2CO). 2-Nitro-N-[5-(4-phenyl-1piperazinyl)pentyl]benzenesulfonamide (X) (77%), m. 128-30.degree. (aq. MeOH-DMF), was obtained from 1-(5-aminopentyl)-4-phenylpiperazine. Redn. of 74.3 g. X with H in the presence of Pd-C gave 54.2 g. 2-amino-N-[5-(4-phenyl-1-piperazinyl)pentyl]benzenesulfonamide, m. 152-3.degree. (Me2CO-CHCl3-n-C6H14), of which 52.9 g. was converted to 22.2 g. 2-[5-(4-phenyl-1-piperazinyl)pentyl]-2H-1,2,4-benzothiadiazin-3(4H)-one 1,1-dioxide-2HCl, m. 190.degree. (decompd. 175.degree.) (MeOH contg. HCl). 1-(3-Aminopropyl)-4-fluorophenylpiperazine (35.6 g.) gave 40.3 g. 2-nitro-N-[3-(4-p-fluorophenyl-1-piperazinyl)propyl]benzenesulfona mide, m. 132-3.degree. (Me2CO-MeOH-n-C6H14), of which 39 g. was reduced to yield 34.2 g. of 2-amino-N-[3-(4-p-fluorophenyl)propyl]benzenesulfonamide, m. 121-2.degree. (aq. MeOH), and 40 g. of this compd. was treated with COC12 to yield 30.2 g. of 2-[3-(4-p-fluorophenyl-1-piperazinyl)propyl]-2H-1,2,4-benzothiadiazin-3(4H)-one 1,1-dioxide-HCl, m. 228-230.degree. (aq. MeOH-EtOAc). Spectral data are included in the analytical results for the new compds.

RN 13349-05-8 CAPLUS
CN Benzenesulfonamide, o-amino-N-[3-[4-(m-chlorophenyl)-1-piperazinyl]propyl], trihydrochloride (8CI) (CA INDEX NAME)

RN 13349-06-9 CAPLUS
CN Benzenesulfonamide, o-amino-N-[3-[4-(m-chlorophenyl)-1-piperazinyl]propyl](8CI) (CA INDEX NAME)

RN 13530-43-3 CAPLUS
CN Benzenesulfonamide, o-nitro-N-[5-(4-phenyl-1-piperazinyl)pentyl]- (8CI)
(CA INDEX NAME)

RN 13530-44-4 CAPLUS

CN Benzenesulfonamide, o-amino-N-[5-(4-phenyl-1-piperazinyl)pentyl]- (8CI) (CA INDEX NAME)

RN 13530-46-6 CAPLUS

CN Benzenesulfonamide, N-[3-[4-(p-fluorophenyl)-1-piperazinyl]propyl]-o-nitro-(8CI) (CA INDEX NAME)

RN 13530-47-7 CAPLUS

CN Benzenesulfonamide, o-amino-N-[3-[4-(p-fluorophenyl)-1-piperazinyl]propyl]-(8CI) (CA INDEX NAME)

10/768579

RN 13559-86-9 CAPLUS

CN Benzenesulfonamide, o-amino-N-[3-(4-phenyl-1-piperazinyl)propyl]-, dihydrochloride (8CI) (CA INDEX NAME)

•2 HCl

RN 13631-18-0 CAPLUS
CN Benzenesulfonamide, o-amino-N-[3-(4-phenyl-1-piperazinyl)propyl]- (8CI)
(CA INDEX NAME)

L3 ANSWER 85 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1956:32338 CAPLUS

DN 50:32338

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OREF 50:6522c-d
    Phenyl-substituted piperazine compounds
    Fleming, Robert W.; Parcell, Robert F.
IN
PA
    Parke, Davis & Co.
DT
    Patent
LA
    Unavailable
FAN.CNT 1
                     KIND DATE APPLICATION NO.
    PATENT NO.
                                                             DATE .
                      ----
    US 2722529
PΙ
                             19551101 US
    See Brit. 721,417 (C.A. 50, 2683i).
AB
    500797-20-6, Methanesulfonamide, N-[3-(4-phenyl-1-
IT
    piperazinyl)propyl]-
       (prepn. of)
RN
    500797-20-6 CAPLUS
CN
    Methanesulfonamide, N-[3-(4-phenyl-1-piperazinyl)propyl]- (9CI) (CA INDEX
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Same as 85 L3ANSWER 86 OF 86 CAPLUS COPYRIGHT 2006 ACS on STN AN 1956:12597 CAPLUS DN 50:12597 OREF 50:2683i,2684a-b Phenyl substituted piperazine compounds Parke, Davis & Co. DТ Patent LΑ Unavailable FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. 19550105 GB PΙ GB 721417 For diagram(s), see printed CA Issue. GI In this abstr. R = CH2.CH2.NPh.CH2.CH2.N. RCH2CH2CH2NH2 (21.9 g.) and 100 cc. Et02CH is heated under reflux for 2 h., the excess ester removed by distn. and the residue recrystd. from C6H6 and petr. ether to yield 8 g. RCH2CH2CH2NHCOH, m. 100-1.degree.. The following compds. are also described: RCH2CH2CH2NHCOCHCl2, m. 81-2.degree.; RCH2CH2CH2NHSO2Me (I), m. 105-7.degree.; I.HBr salt, m. 172-4.degree.; RCH2CH2CH2NHBz, m. 109-10.degree.; R(CH2)6NHCOH, m. 65-7.degree.; R(CH2)3NHAc, m. 100-2.degree.; R(CH2)3NHCONH2, m. 146-8.degree.; RCH2CHMeNHAc, m. 96-8.degree.; R(CH2)3NHCOR' (R' = cyclohexyl), m. 112-14.degree.; R(CH2) 3NHCO(CH2) 5R', m. 90-1.degree.; R(CH2) 2NHCOCH2Ph, m. 127-9.degree.; RCH2CH2NHCOH, m. 95-6.degree.; RCH2CH2NHAc, m. 105-7.degree.; R(CH2) 3NHCOEt, m. 81-2.degree.; R(CH2) 4NHtAc, m. 107-8.degree.;

R(CH2) 5NHAc, m. 86-7.degree.; R(CH2) 4NHSO2Me, m. 80-1.degree.;

500797-20-6, Methanesulfonamide, N-[3-(4-phenyl-1-

R(CH2)5NHSO2Me, m. 103-5.degree..

piperazinyl)propyl]-

IT

(prepn. of)

RN 500797-20-6 CAPLUS

CN Methanesulfonamide, N-[3-(4-phenyl-1-piperazinyl)propyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & O \\ \parallel & \parallel \\ N & \parallel \\ O & \\ Ph & O \end{array}$$

=> log h COST IN U.S. DOLLARS SINCE FILE TOTAL SESSION ENTRY FULL ESTIMATED COST 87.79 99.44 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL **ENTRY** SESSION CA SUBSCRIBER PRICE -12.75-12.75

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 15:17:30 ON 29 JAN 2006